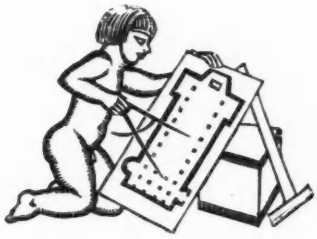
THE ARCHITECTS' JOURNAL



WEDNESDAY, JANUARY 1, 1930

ARCHITECT OR ENGINEER?

"Adherence to 'the mechanical fallacy' will not enable a designer to achieve that success in civic design which we should like to see exemplified in the new Dorchester House."

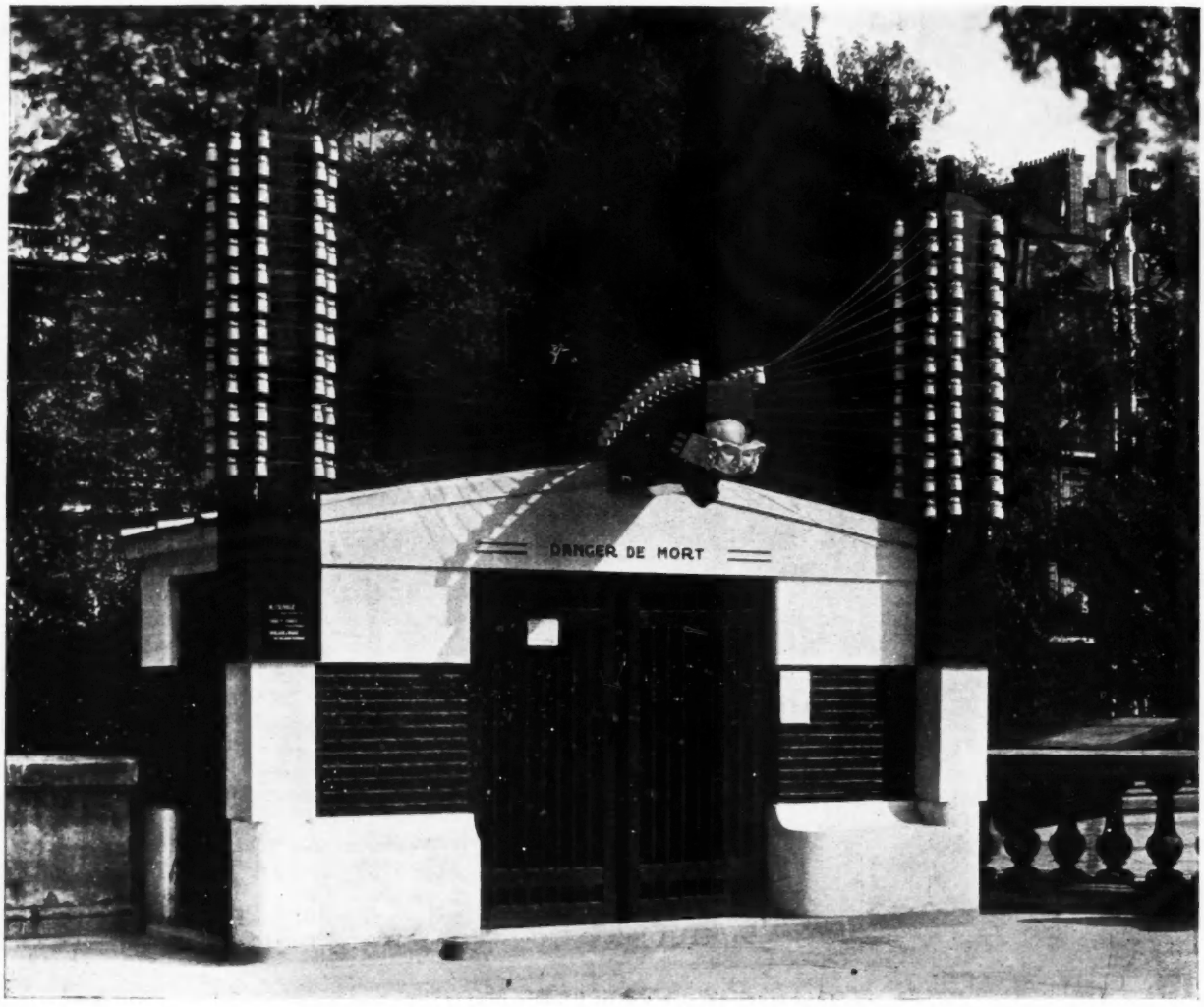
THE recent correspondence in *The Observer*, in which the old issue between architects and engineers has been raised, once more appears to have generated more heat than light. It began with enthusiastic praise of Sir Owen Williams in his capacity of designer of the new building which is to be erected on the site of Dorchester House. This, coming from an architect who, apparently, had not seen the designs of the building in question, seemed to be a gratuitous surrender of a line of defence which the architectural profession as a whole regards as being of great strategic importance; so it was not surprising that it evoked a strongly-worded protest. Yet, undoubtedly, professional jealousies are bad in themselves, and the only way to get rid of them is to appeal to some social or artistic principle to which the disputants on either side can give their unqualified allegiance.

What kind of building do most people want to see erected on the site of Dorchester House? Obviously, the best building possible; and they are utterly indifferent as to whether an architect or an engineer designs it, provided that it is an ornament to Park Lane. For only a few pessimists will say that they do not care what becomes of this thoroughfare on the ground that, owing to recent happenings there, it is, architecturally, a devastated area already. There still remains a possibility that a new Dorchester House will actually be an improvement upon the old, and will contribute to a street composition which need not disgrace the twentieth century. But we can only look forward to this happy consummation if we are assured that the designer of the new building is acquainted with certain cultural values which must be borne in mind if its façades are to have a human quality, and are to be characterized by the peculiar kind of beauty which appertains to architecture.

It is possible that an engineer may possess the knowledge which is required for the creation of such a design, and it would be unfair to condemn him out of hand; yet a critic is showing an equal lack of intellectual balance in acclaiming the engineer as a heaven-sent saviour who is going to show us architects how the new Dorchester House is to be designed, when as yet he has given no proof of having won the artistic victories which would entitle him to such eulogies.

One thing at least is certain: an adherence to the worn-out mid-Victorian shibboleth stigmatized by the late Mr. Geoffrey Scott as "the mechanical fallacy" will not enable a designer to achieve that success in civic design which we should like to see exemplified in the new Dorchester House. And, unfortunately, it must be confessed that the architectural correspondent who would have us welcome the intervention of Sir Owen Williams in this particular instance, and gave the impression that he was voicing the engineer's own opinions, was not ashamed to reiterate the aforementioned fallacy as if it were a newly-discovered truth. For it is indubitably not sufficient for the designer of a building to have the kind of constructional competence which engineers acquire, nor is it a useful comparison to liken a new building to an aeroplane or motor-car, and to say that the former need only follow the dictates of structure and utility in order to be beautiful. To describe aeroplanes and motor-cars as necessarily beautiful is to beg the question. Perhaps when the critics have recovered from their first child-like enthusiasm for mechanical inventions, and begin to apply æsthetic standards to the new engines of locomotion, they will discover that many of them are extremely ugly, for the simple reason that they fail to conform to those subtle standards of organic design which a trained architect is accustomed to acknowledge.

The obvious *lacuna* in the engineer's artistic equipment is due to the fact that he is concerned with individual structures only, and his scientific training does not bring him to a consideration of those subtle problems which concern the mutual harmony of several units of building which are set in juxtaposition. Let not the architect, then, in a spirit of too great complacency, make public surrender to the engineer!



STRINGS OF THE VOLT

This building was a purely temporary electric transformer station designed by Henri Sauvage to tap one of the main high-tension sector cables of the Paris network, step down its voltage and distribute its current to all parts of the 1925 Exposition des Arts Décoratifs. It might well serve as an exemplar for the transformer stations to be used for the rural electrification of England.

The prominent inscription Danger de Mort *was certainly no idle warning. Indeed, it seemed astonishing to English eyes that the municipal authorities of Paris should have allowed an exhibition of anything but non-inflammable construction, and one containing so many valuable exhibits, to be fed by naked overhead conductors.*

The materials used in this remarkably adroit and workmanlike essay in substation design—timber, brick, cement, ordinary glazed earthenware telegraph insulators and drawn copper wire—were the cheapest and readiest to hand. Notice the way the protuberant, slightly arched central bracket (the silvered head of which was modelled by Mme. Thérèse Schueler) knits together the composition, and is webbed to the deftly-grouped pairs of "mustard-pots" of the twin timber pylons, much as the strings of a fiddle are held taut over the bridge by parallel rows of screws. The wooden gate (clearly a stock pattern), however, would undoubtedly have repaid more individual treatment.

NEWS & TOPICS

AMENITIES

AS Mr. Gerald Barry observed, in the last of his broadcast talks on "The Week in London," it is remarkable what a dearth of news there has been during the holiday period, despite the fact that for two days no papers were edited. Mr. Barry has all along been on the side of the angels in his advocacy of those movements that may be briefly comprehended in the word "amenities." It was on one of these subjects that *The Daily Telegraph* published letters, written in the House of Commons, on Christmas Eve, by Mr. Stanley Baldwin and Mr. Lloyd George. Referring to the countryside, "the visible history of England," the ex-Premier writes: "Its beauty is a great national possession, and its preservation a national duty." With such aspirations the Liberal leader is in agreement: "While it would be criminal to allow a sentiment of mere reaction to restrict the nation in its search for better housing, sunlight and fresh air . . . it is of the utmost importance that these developments shall be carried out in a manner reflecting not the wasteful greed of the jerry-builder and the profiteer, but the wisest planning and best taste which the nation can command."

★

Let us determine that these shall not remain mere pious hopes. When Sir William Crawford, in the same correspondence, answers his own question: "Who are to blame for the present state of affairs? Architects, surveyors, town-planning authorities, advertising men, and, last but not least, the public . . ." however, I feel he is doing the profession less than justice. The order of culpability should surely be reversed. The most indifferent building in which a qualified architect was ever concerned cannot conceivably wreak the havoc of the average sign set up by the advertising man. The unfortunate circumstance is that so many buildings are put up without benefit of architecture.

CHARING CROSS BRIDGE BILL—

Parliament will re-assemble after the Christmas recess on Tuesday, January 21, but it is unlikely that the House of Commons will have an opportunity of discussing the private Bill, promoted to enable the L.C.C. to erect the new Charing Cross Bridge, until next spring. The text of the Bill, however, is now available. In the first part of the Bill it is declared to be expedient that the Council should be empowered to erect a bridge for pedestrians and vehicular traffic across the Thames at Charing Cross; to construct an embankment wall and embankment on the Lambeth side of the river, and to erect a temporary bridge for use during the construction of the new bridge; to make new streets and widenings and alterations of streets, including a temporary approach to the temporary bridge; to acquire lands and property for the purpose of the bridge and street works; and to construct tramways. It is also declared to be expedient to remove Charing Cross station to a site across the river, to demolish the existing bridge and to erect (by the Southern Railway Co.) a new terminal station, and to enter into heads of agreement on these matters by the L.C.C. and the proprietors of the railway. The estimated capital expenditure of the scheme is £14,660,000.

—AND REFLECTIONS ON ITS FUTURE

So much for the powers sought. There is much still to be done if they are to be applied in the most profitable way, from the point of view of future return on this vast investment, quite as much as from the purely æsthetic one. It seems pretty clear that, grievously disappointing as is the official scheme which the powers that be are thrusting forward, its worst defects are due to the Southern Railway's inexplicable and inexcusable refusal of a site for their new station adjoining the present Waterloo terminus, which was, in fact, the first proposal to be made to them, and their insistence upon a river frontage for it. As Mr. Goodhart-Rendel has said: "It is absurd to suppose that any reason there may be in this demand could justify its concession at the cost of the evils it would entail" (the barricading of traffic and the perpetuation of the south side slums).

★

But is there, as a matter of sober fact, any necessity whatever for a new station? Is not the whole matter being regarded in too parochial a frame of mind on the part of the railway company? It is years since Mr. H. S. Leaning advanced, under the ægis of the London Society, a plea for the study and rationalization of the railway systems running into London as a comprehensive whole; every Parliamentary Select Committee that has reported on railway Bills for decades past has set up a finger-post pointing in the same direction. It so happens that the Government announce their intention of moving in the matter of London transport at the very time when the Charing Cross scheme is about to be debated. What an opportunity! Mr. Leaning's scheme of 1922 visualized four main terminal stations only in London, to be cleared of all suburban traffic by interweaving the same with the Underground system. In briefly recapitulating these plans in a letter to *The Times* of December 13, he pertinently inquires why, if the great railway trunk lines running into London from the North and West can do with one, or at most two, stations apiece, why does the Southern require six?

★

Sooner or later London's railways will just *have* to be co-ordinated. In the process the new south-side substitute for Charing Cross station may well find itself left derelict. Then why build it? With this incubus removed, the way would be clear for a great competition envisaging the remoulding of the whole of this important London area, as has already been advocated in this JOURNAL.

THE LATE W. L. LUCAS

I cannot leave the subject of the Bridge without a reference to the death, on Christmas Eve, of Mr. William Louis Lucas, F.R.I.B.A., for he was one of the few advocates of a "high-level" structure at Charing Cross, and the first to put forward (but this was years ago) the idea of the removal of the station. Mr. Lucas, who was sixty-three years of age, was a pupil of the late Ernest George, and one of his most important works was the offices for the Imperial Continental Gas Company, in Devonshire Square, E.C. His interests were not confined to architecture. An ardent Territorial, he transferred, on the outbreak of war, at the age of forty-eight, to the regular Artillery, and saw active service in France, where he was gassed. Though returning, after recuperation, in command of a brigade ammunition column, he never entirely recovered, and had latterly lived a retired life. ASTRAGAL



A near view of the principal entrance, seen in the adjacent photograph. It is interesting to note that the plasterwork about the first-floor window was not pre-cast, but worked by hand in situ.



General view of the main front, facing the village square,

CLUB HOUSE IN A

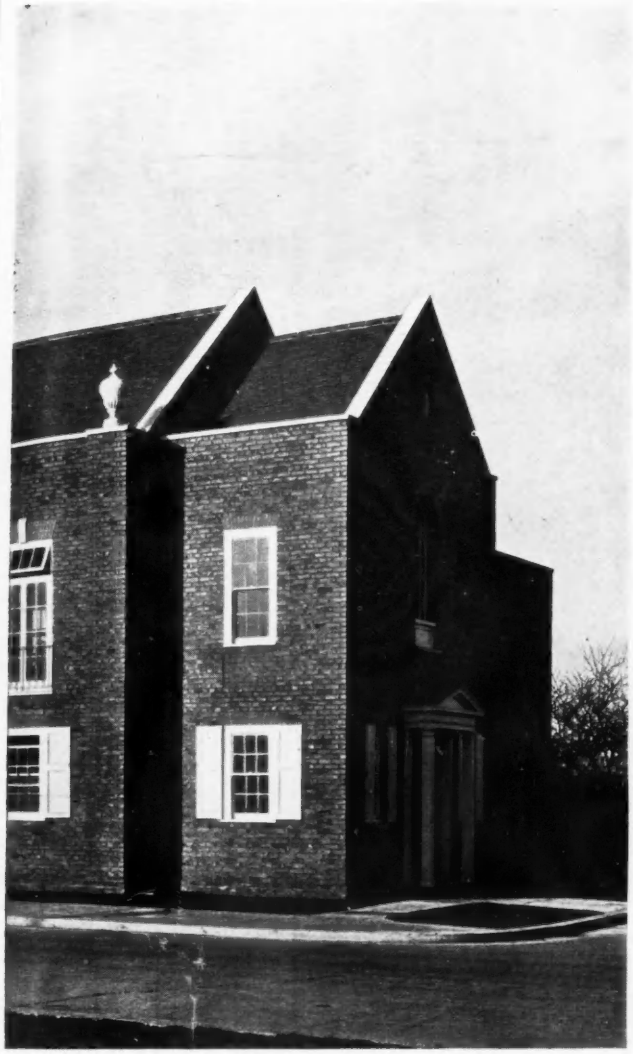
DESIGNED BY

WHEN a paper-mill was established recently at Kemsley, two or three miles from the older mills in the town of Sittingbourne, Kent, a village, to provide housing for the workpeople engaged, was laid out at the same time, and has been added to continuously as the mill has been extended. The club house, the first building of a purely social character to be completed in Kemsley, is the latest addition; and stands alone above the more or less uniform level of the cottage roofs. Its position is a prominent one, facing the village square, itself approached and crossed by a road, the vista of which is closed by the building that has been placed axially therewith.

It has been designed more to be the "house" of the village than a building of the institute class. At the present time there are about 800 persons housed in the surrounding cottages, though the complete scheme provides for nearer 3,000. An inn and shops are included in the layout, and when they are completed will render the village self-supplying and self-sufficient. It is intended that the shops shall be built round the square, with the club and the inn at the end of the village nearest the mills.

In planning the club house the aim has been to give as large a hall as possible, with its own entrance from the road, and cloak-rooms, etc., and to link it up with the smaller club-rooms, which include a library, a lounge and billiards-room, and a bar for alcoholic drinks, with service to the upstairs hall. This hall is of such a character as to be suitable for general purposes, including that of a cinema, a dance hall, a concert room or a theatre. Thus a projection-room, completely equipped with projection apparatus, is provided for showing films, while the floor is semi-sprung and boarded with maple.

The building has been erected in Sittingbourne stock bricks, has a tiled roof, and is fitted with metal casement windows. There are dressings of artificial stone, and some ornamental plasterwork to central first-floor window, etc.



with the approach through which it is axially placed.



Details of the side entrance, a glimpse of which is also to be seen in the central view. It leads direct to cloak-rooms and the main hall, and so will be used by others than club members.

KENTISH VILLAGE

ADAMS, THOMPSON AND FRY

The Sittingbourne stock brick used on the building has been for long the normal brick in use in London, where it becomes a little drab after a few years. This tendency has been countered here by using flush frame windows, with the shutters and plasterwork all painted in varying shades of cream and white, so as to produce an effect of brilliance and lightness.

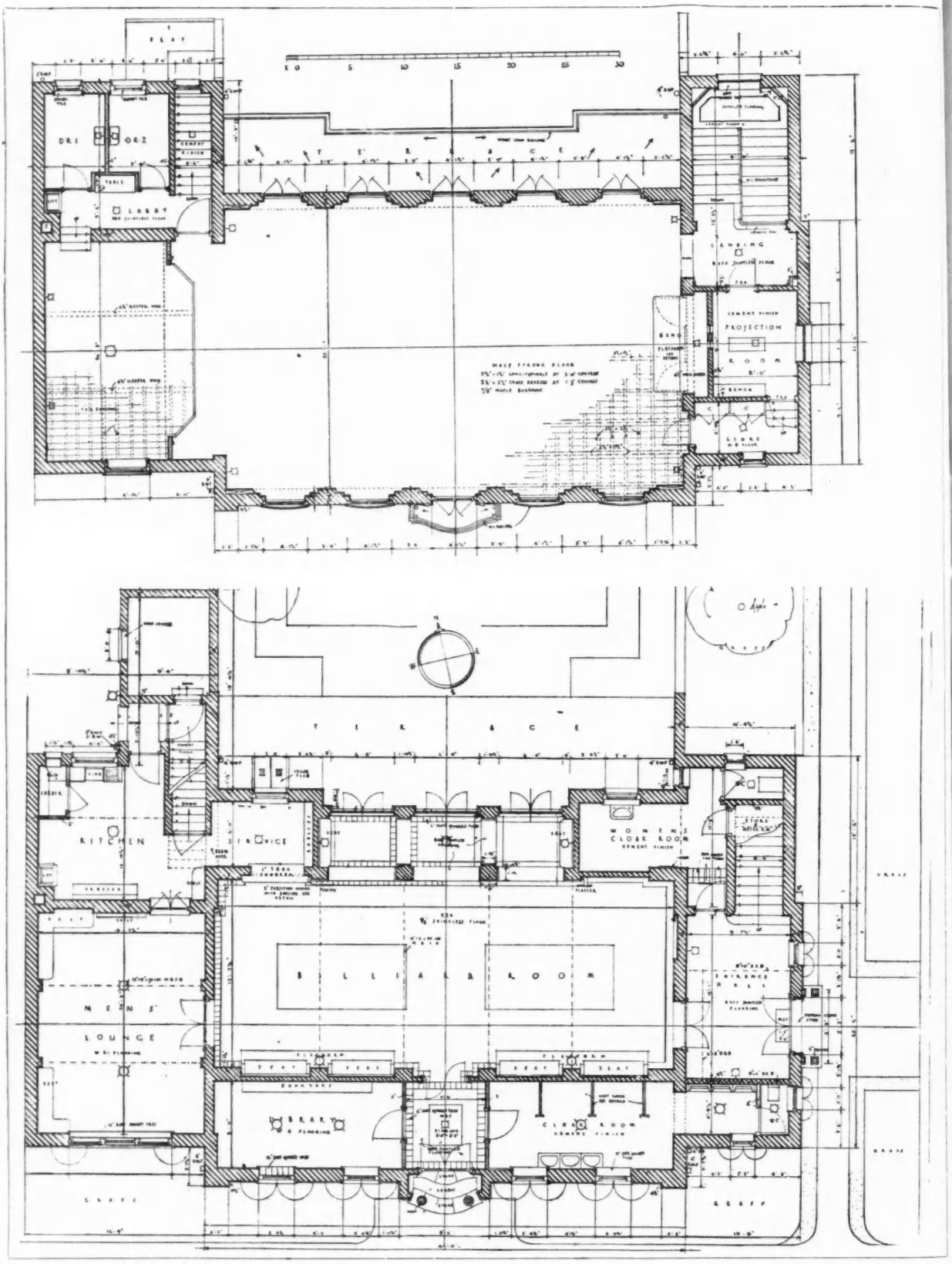
A feature of the scheme is the layout of the garden at the back. This has been paved with stone from the Stancliffe quarries in Derbyshire and red brick, mixed, and is surrounded by flower borders. On the road side there is to be a wrought-iron gate and railings above the dwarf wall, both of which are being made by a local smith. Metalwork is, in fact, freely employed, as, for example, in the weather vane, which was specially made for its position above the belfry to the architects' design.

The compact nature of the planning will be appreciated, and it is noteworthy that every care has been given to comfort, although the keynote of the whole building is economical simplicity. With what success these results have been achieved will be clear from a study of the accompanying illustrations of, for example, the billiards room and the main staircase.

It is interesting to know that a good deal of heavy furniture, such as bookcases, benches and tables, and all the prominent electric light fittings, were designed by the architects, and the furniture carried out by the general contractors, without materially adding to the cost of a relatively cheap building.

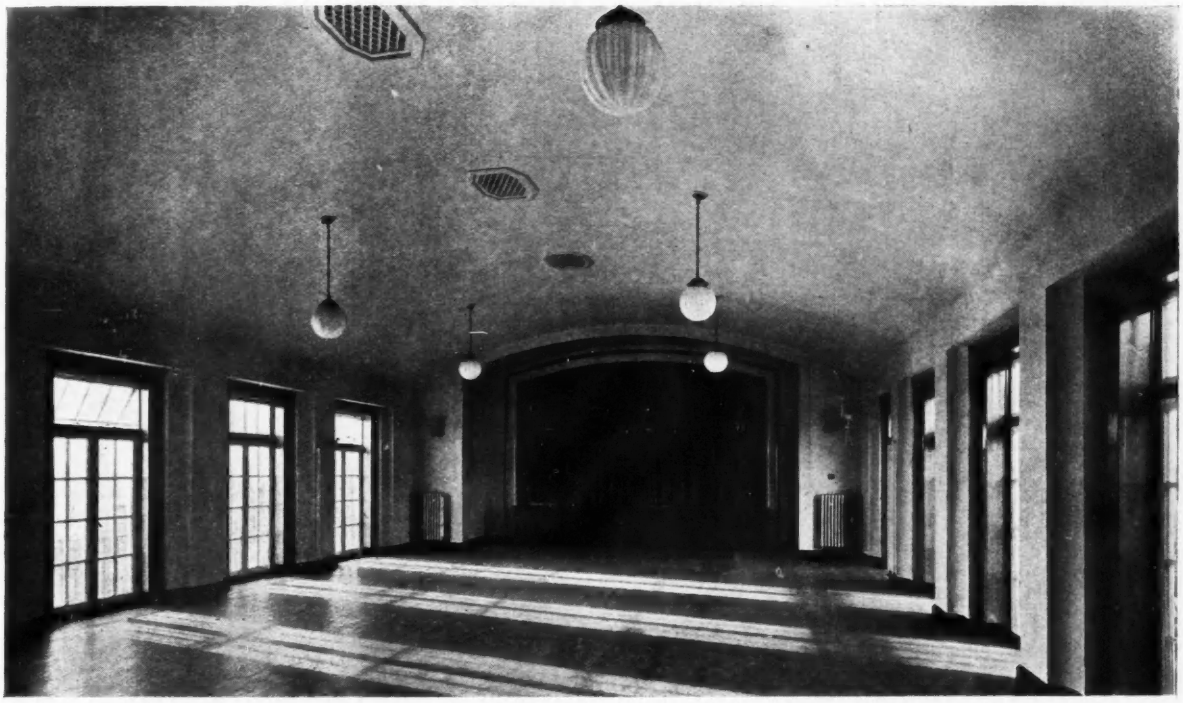
Some little way from the club premises is a bowling green, run in conjunction, and for this there has been provided a small pavilion which is part of the general scheme, and is the subject of illustrations on a following page.

The club house was the last gift to his workpeople of the late Mr. Frank Lloyd, head of the well-known firm of paper-makers.

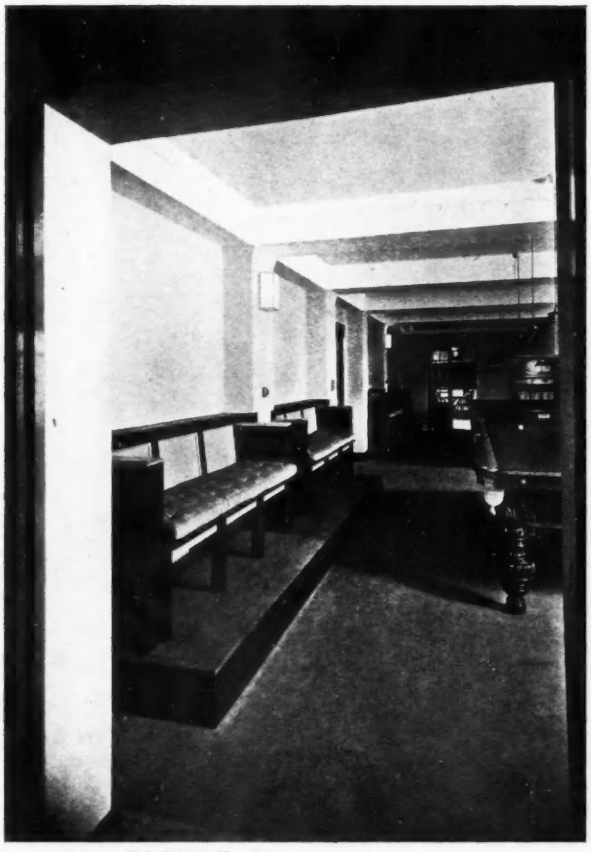


Kemsley Village Club House, Kent.] [*By Adams, Thompson and Fry.*

The architects' plans of the ground floor (including part of layout of garden, etc.) and first floor. The club quarters provide a billiards room, opening into the garden, library, lounge and bar, and service accommodation. Above, the space is mainly devoted to a hall with a cinema projection room among other adjuncts. A sectional drawing is reproduced on page 12.



In the main hall, on the first floor, looking towards the stage, which is adaptable for concerts, theatricals or cinema purposes ; film pictures are thrown on to the back wall of the stage, and at the other end of the hall is a fully-equipped projection room.



Kemsley Village Club House, Kent.] [*By Adams, Thompson and Fry.*

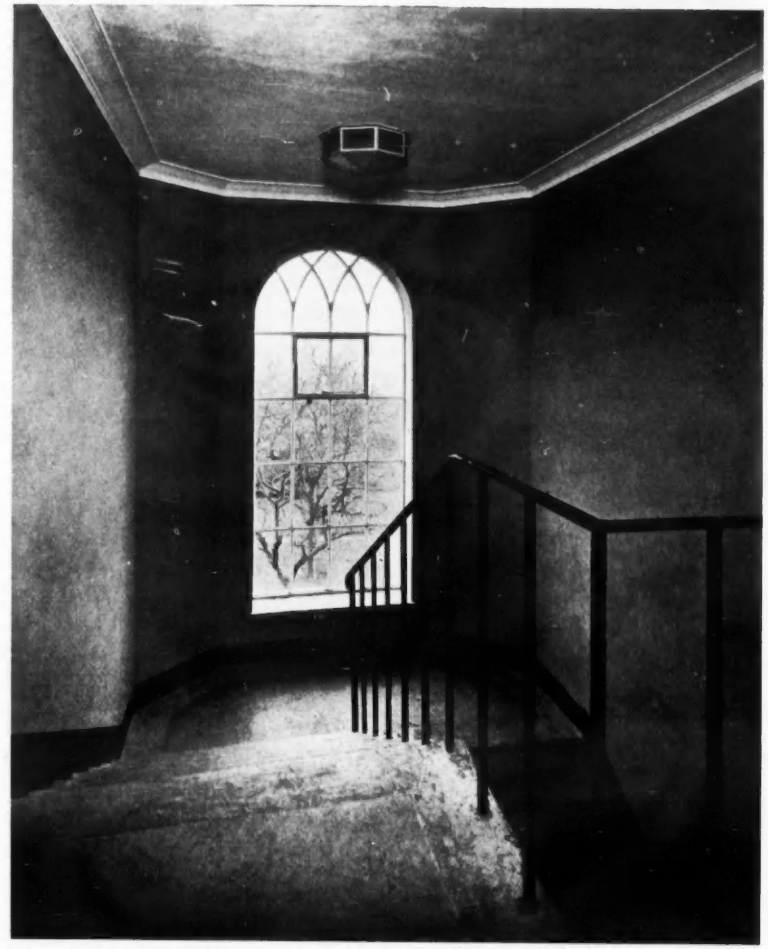
One side of the billiards room, showing the raised seating, provided, as in the most sumptuous halls, to facilitate the watching, in comfort, of play on the tables.



The other side of the billiards room, which overlooks the garden and has windows opening direct on to it from the alcove. The pillars of bare brick are an effective feature.

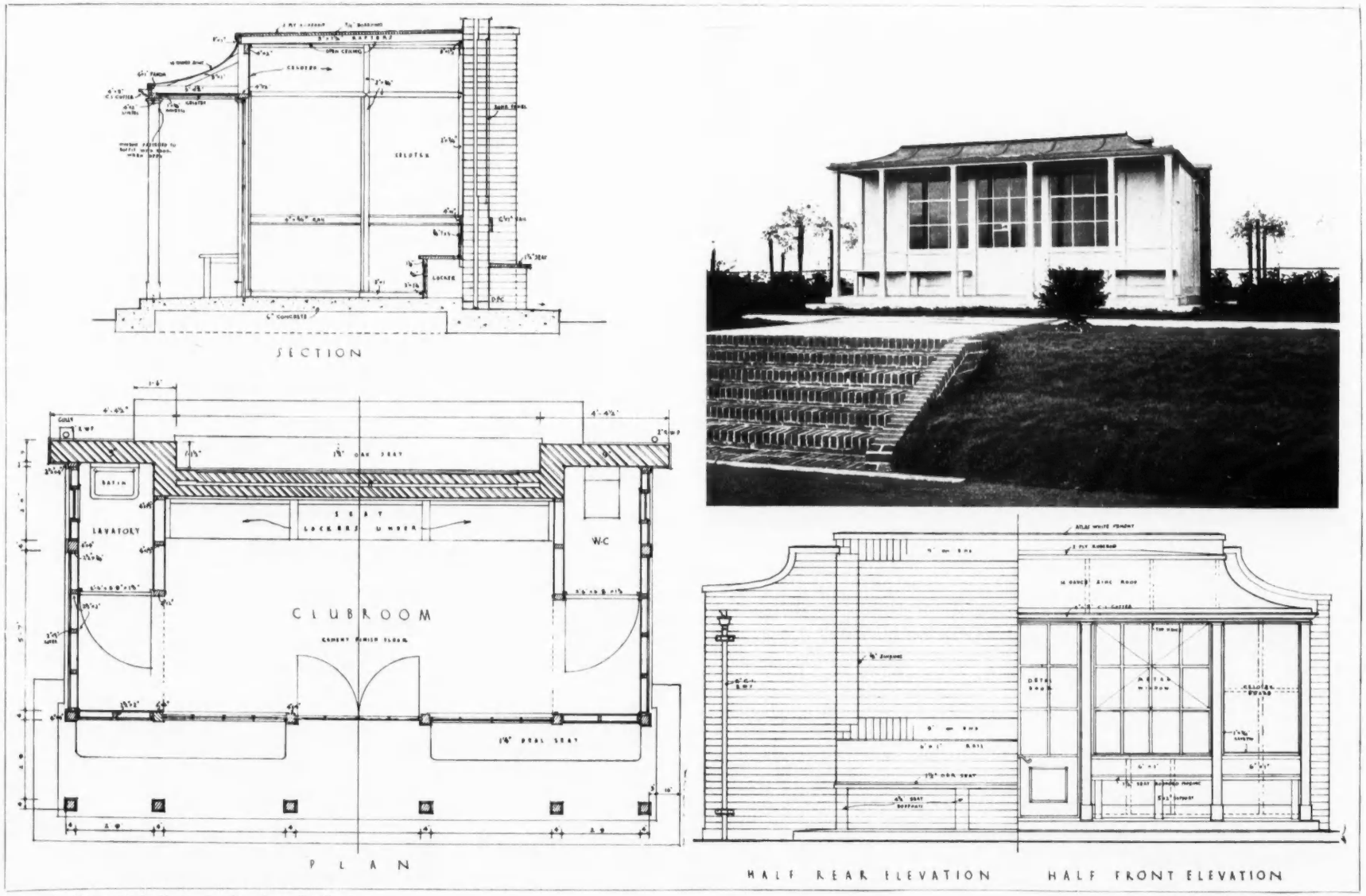


The rear or garden front. A wrought-iron gate and railings, made by the local smith, are to be placed across the opening to the paved garden, and on the low wall.



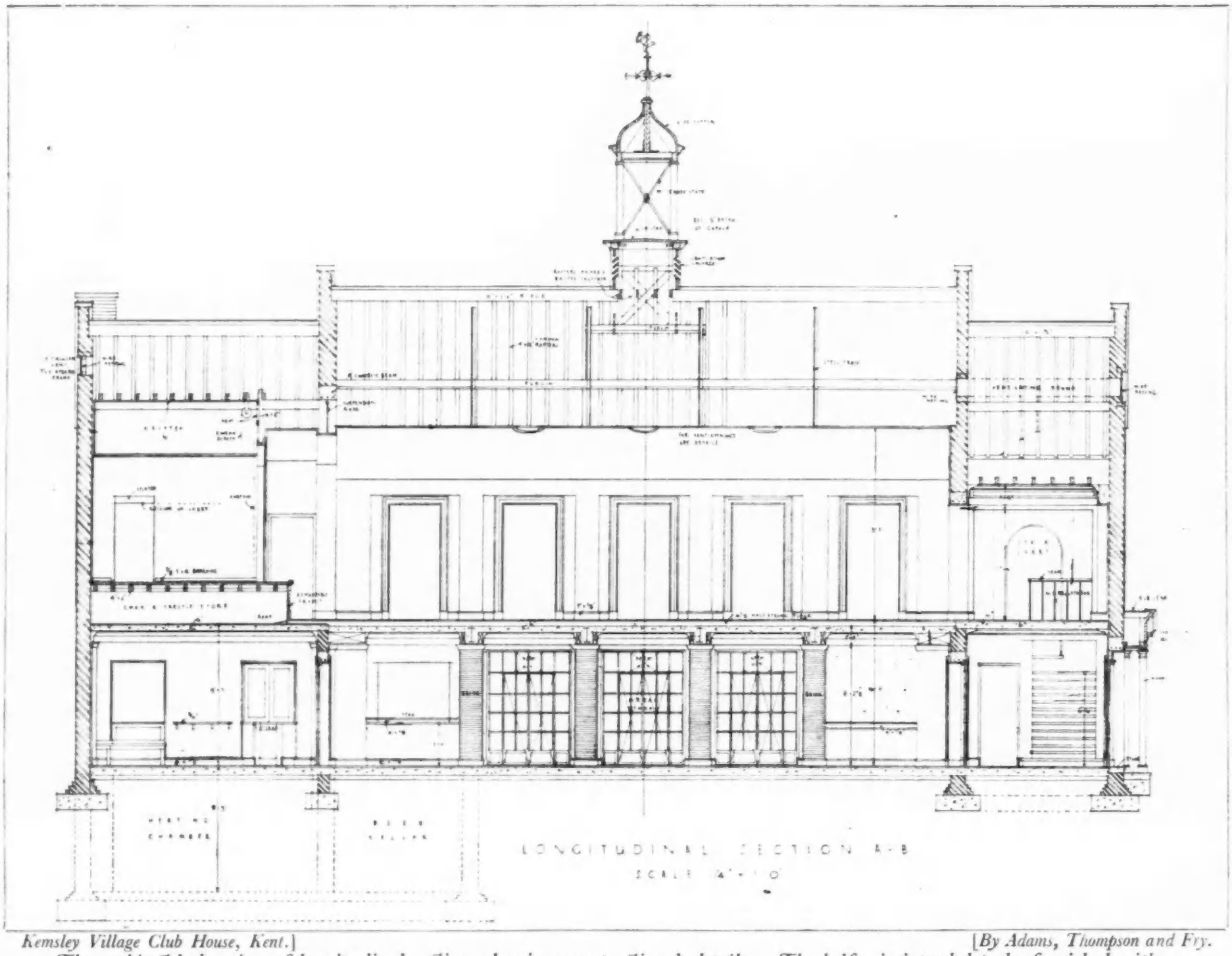
The main staircase, leading from the side entrance to the hall. The window is that shown in the photograph of the exterior, reproduced to the left of this one. The walls are coloured pale green, and the floor is finished in buff and brown. The lamp, made to the architects' design, is painted pale green outside and post-office red within.

Kemsley Village Club House, Kent.] [*By Adams, Thompson and Fry.*



Kemsley Village Club, Kent : Bowling Green Pavilion.] [*By Adams, Thompson and Fry.*

The architects' plan, elevation and section drawings, together with a photograph, of a small pavilion for the bowling green connected with the club. The low yew hedge which shows to right and left, in the photograph, is estimated to grow to the height of the standard roses, planted in front of it, in ten years' time. The cost of the pavilion, including fittings, w.c., lavatory, and an oak bench (not shown) was about £200



Kemsley Village Club House, Kent. [*By Adams, Thompson and Fry.*

The architects' drawing of longitudinal section, showing constructional details. The belfry is intended to be furnished with a single bell. As an alternative to the removable cinema screen, pictures are thrown on to the back stage wall.

House at Hampstead, N.W.



No. 21 West Heath Avenue, Hampstead, N.W. [*By C. H. James.*

Plans of the house illustrated and described on the facing and subsequent pages. The service accommodation is concentrated on the left on both floors, and advantage has been taken of the built-in garage to plan a music room in an isolated position over it.

HOUSE AT HAMPSTEAD, N.W.

DESIGNED BY C. H. JAMES



The south, or garden, front. The large window, to the left, on the ground floor, lights the drawing-room; the two immediately to its right belong to the dining-room. The brickwork visible is of London stocks, with dressings from Tunbridge Wells.

THIS house was designed for a client who was particularly anxious not to use red bricks or tiles, and was therefore carried out in a colour scheme of green, yellow and grey. The brickwork up to the plinth level is of brindled Staffordshire wire cuts, the general walling above being of picked London stock facings in lime mortar, with dressings of grey High Brooms bricks from near Tunbridge Wells.

The roof is covered with green glazed interlocking pantiles. The windows throughout the building are standard steel casements, set in wooden frames, these latter, and the front doorway and surround (fully described and illustrated on pages 1 and 2 of this issue), being the only woodwork in the house which is painted.

The key to the planning is to be found in the fact that whereas one of the occupants had the wish to be free to practice singing and to play the pianoforte, the others did not wish to suffer possible disturbance therefrom. The music-room was therefore placed in a position over the garage, in the wing otherwise devoted to servants' quarters, isolated from the remainder of the living accommodation on the floor below.

The aspect of the road front is due north, so that the main sitting-rooms, on the ground floor, and four of the bedrooms above, face the garden on the south side of the house, and enjoy maximum sunlight. The house is centrally heated throughout by fifteen radiators, served by a boiler in the boiler-house, whilst a small boiler adjoining the gas cooker in the kitchen supplies hot water for domestic uses inside the house. The whole of the joinery was made by the general contractors, who, in the architect's words, "made a very good job of the work."



The main entrance. The porch is illustrated on the first and second pages of this issue.

Internally, the whole of the joinery is in British Columbian pine, lightly stained and waxed. The balustrade of the staircase is of moulded, jointed, British Columbian pine boards, with black ebonized handrail and turned newels.

The fireplaces throughout are of marble, that in the dining-room, a general view of which is reproduced, being of Cippolino of a yellowish-grey colour, with a reeded black Belgian architrave, and curb to the hearth, on a background of Roman stone, arranged for a gas-fire. The skirting and moulded shelf are of black Belgian marble, the shelf having rather a large projection to take a bracket clock. The coal fireplace, adaptable for gas, in the drawing-room, also illustrated on a larger scale, has a mantel of somewhat similar character, but of quite different proportions, and the marble immediately surrounding the fire is Rose Numidie.



A general view of the dining-room. The window on the left is one of two overlooking the garden. The marble fireplace is arranged for a gas fire, and has a mantelshelf designed to carry the clock shown. The architrave is of Belgian black marble, reeded.



No. 21, West Heath Avenue, Hampstead, N.W.]

Looking across the hall towards the staircase. A glimpse of the study is seen through the open door; the closed one gives into the drawing-room. The woodwork is of British Columbian pine, lightly stained and waxed.



[By C. H. James.

The fireplace in the drawing-room, of which the materials are mainly the same as those used in the dining-room illustrated above, save that the panels nearest the coal fire grate are of Rose Numidie. Gas is also laid on.



ENGLISH PRECEDENT No. 96

DOVECOT, LUNTLEY MANOR, HEREFORDSHIRE

This dovecot is at Luntley Manor, about two miles to the south of Pembridge, in the Leominster district of Herefordshire. It is an example of the seventeenth-century dovecotes of elaborate design which still survive in this district of fine half-timbered houses.

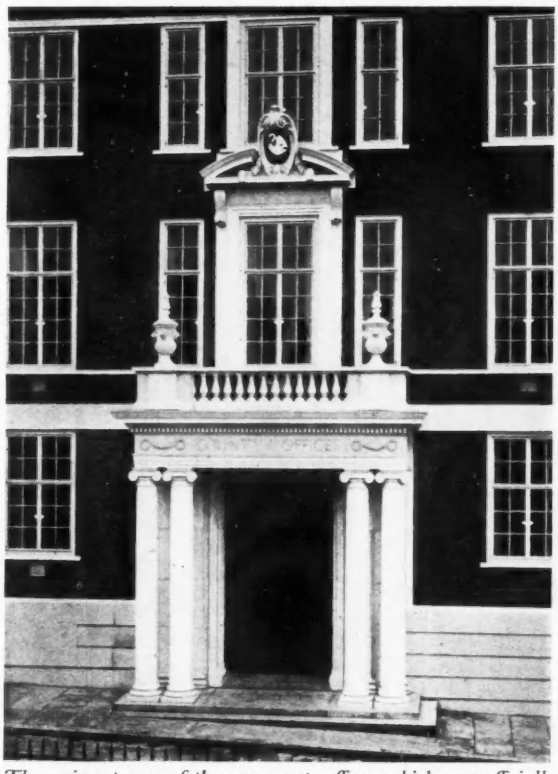
The date 1675 is carved on the shaped doorhead.

—[THOMAS FALCONER.]

NEW OFFICES FOR BUCKS. COUNTY COUNCIL

Walton Street, Aylesbury

DESIGNED BY C. H. RILEY

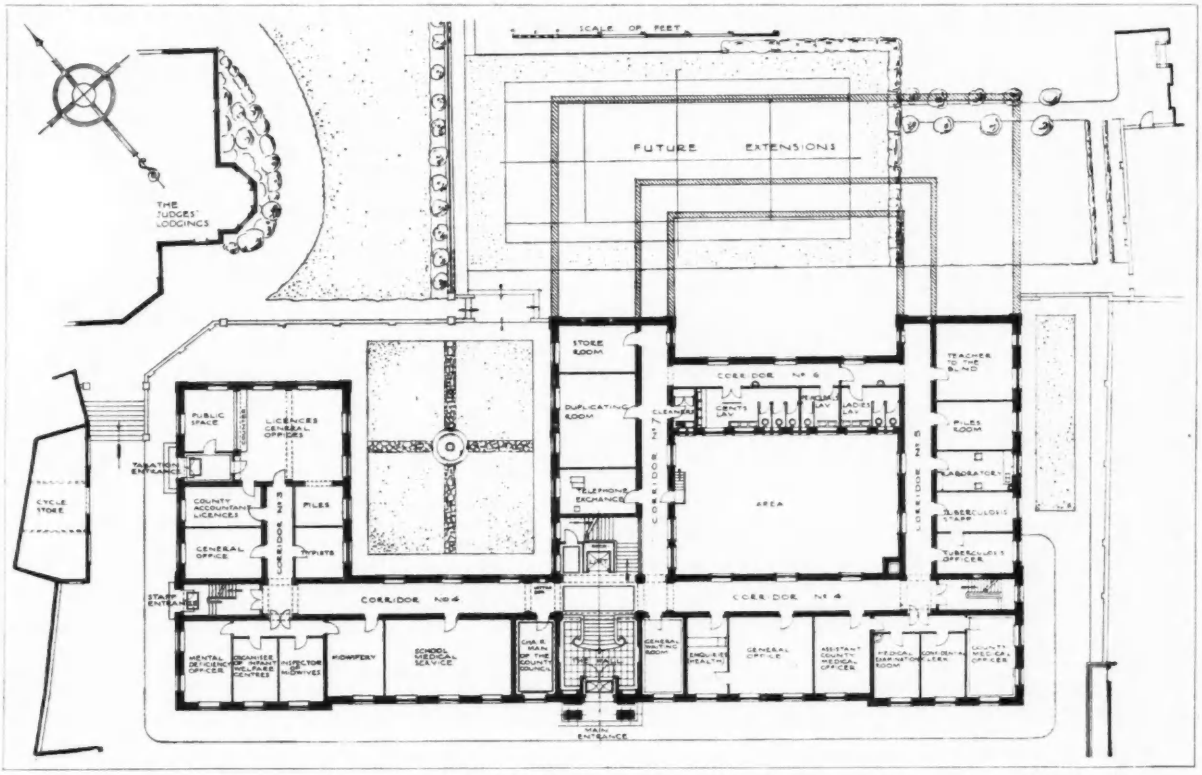


The main entrance of the new county offices, which were officially opened by Dr. Leonard H. West, chairman of the County Council, last month. Building work commenced in May, 1928.

THE Bucks. County Council, on February 8, 1923, considered a resolution of the Standing Joint Committee, suggesting that the Council should appoint a special committee to consider the whole question of their office accommodation with a view to the adoption of a comprehensive scheme for housing the whole of their staff. A committee known as the Special Buildings Committee (later superseded by the County Works Committee) was thereupon set up and all questions relating to office accommodation were referred to that Committee, who shortly afterwards instructed the county architect to prepare reports for consideration—*a:* As to the possibility of adapting the Chief Constable's house, No. 17 Walton Street, so as to provide additional office accommodation, and *b:* As to the best methods of carrying out a general building scheme with a view to housing the whole of the staff, either immediately or in the near future, by the erection of a new building to replace the existing scattered accommodation.

After consideration of various alternative schemes and suggestions, the Council eventually decided upon the erection of a comprehensive block of offices in Walton Street.

The preliminary plans of the new county offices were prepared by Mr. C. H. Riley, the county architect, and after Sir Edwin Cooper had been consulted upon the suitability of the proposals, the county architect's



Ground-floor plan. In view of the narrow width of Walton Street, the building has been set back nearly 30 ft. to provide a private carriage-way in front, leading to the main entrance. The building has been so planned that it could, if necessary, be extended on the east side so as to add about thirty per cent. to the present accommodation.



The main front to Walton Street is about 230 ft. long. The elevations are faced with multicoloured bricks and reconstructed Portland stone dressings; the main roof is covered with Westmorland green slates.



New County Offices, Aylesbury. [*By C. H. Riley.*

In the hall, opposite the main entrance, are steps leading to the main corridor of the ground floor, and beyond them is the main staircase, in the centre of which is a passenger lift. The wrought-iron grille to the lift is at corridor level.

scheme was adopted. Building work commenced in May, 1928.

Owing to the slope of the site, the lowest story is partly under and partly above the ground, and contains the departmental store rooms, heating chamber and caretaker's quarters, the latter consisting of a well-appointed flat, with entrance at road level. The walls of the hall are treated with French stuc to represent Caen stone, and the floors, steps and balustrade are formed with terrazzo. A room for the use of the chairman of the county council adjoins the main entrance, and is panelled in English oak. The telephone exchange, public health and taxation departments are also accommodated on the ground floor, the latter having a separate entrance for the use of persons requiring licences.

On the first floor are the education and highways departments; there is also a large room for committee and other meetings, which can be divided by a folding partition so as to form two smaller rooms when required. This room has an enriched plaster ceiling, and the walls are covered with quartered English oak panelling.

The second floor accommodates the departments of the county accountant, agricultural organizer, county architect and county land agent. Here is a second committee room, which may be used at times by the district auditor.

The mansard roof over the front portion of the building is of steel and concrete construction. It provides a clear floor space, 183 ft. long by 20 ft. wide, and has been designed to facilitate division into offices and store rooms when required. Flat roofs have been provided for the remainder of the building, with a view to another story being erected if necessary at any time.

Altogether the premises provide a floor space of about 34,500 ft. super, in addition to which the main roof has a floor area of another 3,660 sq. ft.

The floors throughout the building are of reinforced concrete, and in the case of the corridors and offices are surfaced with Tasmanian oak blocks. The heating system is by low-pressure hot water, with pump acceleration. The lavatory accommodation has been centralized on each floor. The walls, floors and partitions are all formed with terrazzo, and the white glazed fireclay fittings have all been carefully selected to secure the highest hygienic efficiency. The telephone arrangements provide six Post Office lines and fifty-two extensions. All departments have also a system of buzzers. The whole of the common and facing bricks used in the building were made in the county.

The assistant architect was Mr. J. Harrison, A.R.I.B.A.



Main corridor on the ground floor. On the left are the lift and main staircase, and opposite are steps leading down to the main entrance.

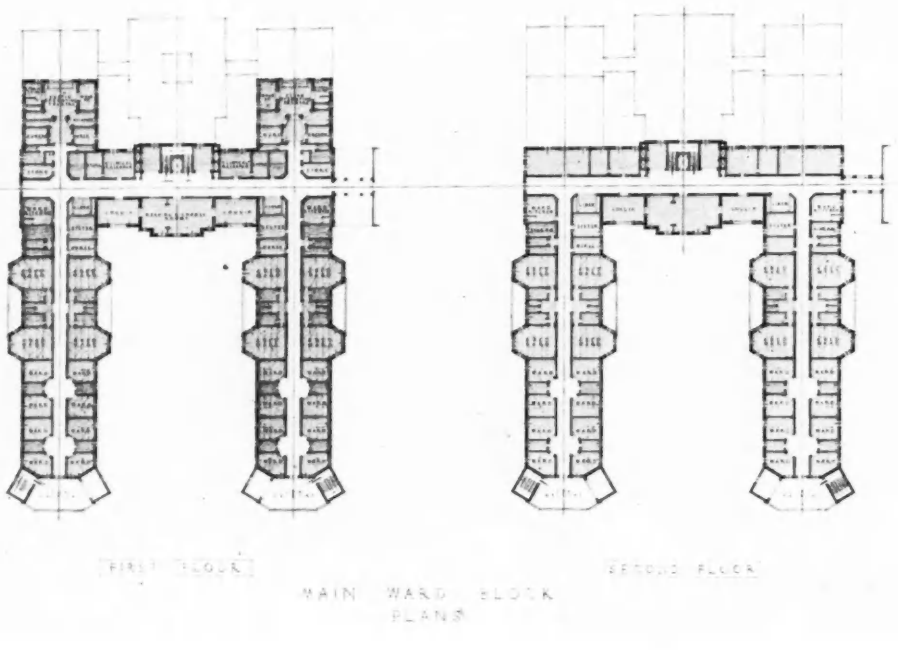


New County Offices, Aylesbury.] [*By C. H. Riley.*

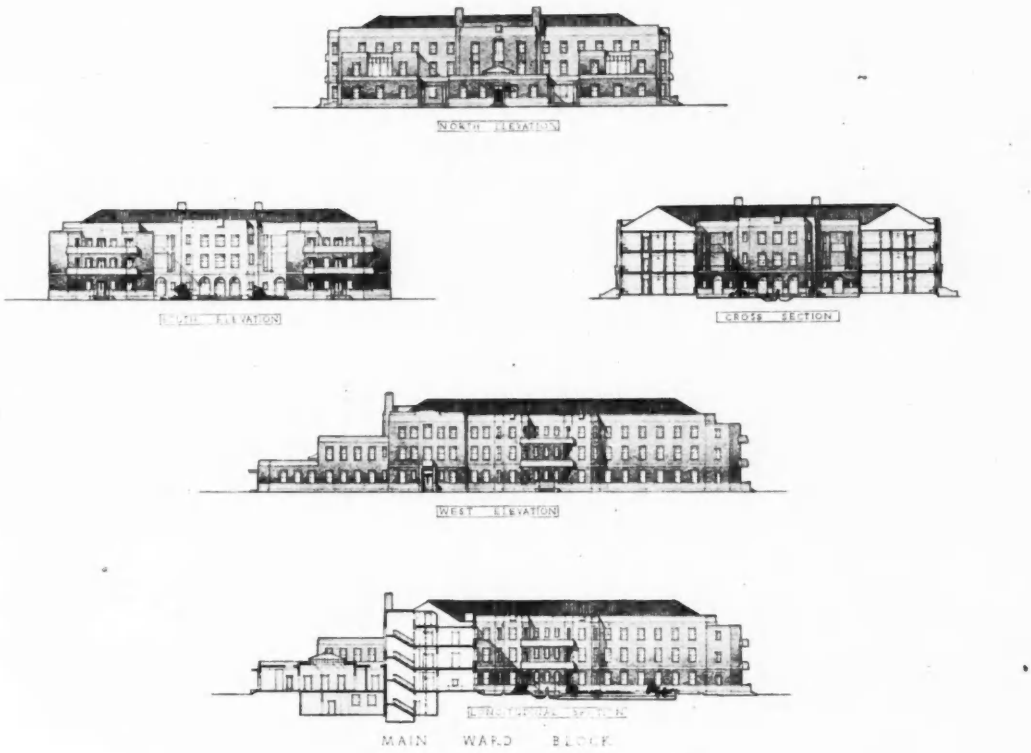
A committee room. The walls are covered with quartered English oak panelling. Excluding the basement there are seventy-three rooms for use as offices and committee rooms. All the offices have been treated in a uniform manner, the general colour scheme being a combination of white, cream, stone and brown.

THE FREEMASONS' HOSPITAL COMPETITION

Sir John Burnet and Partners' Winning Design

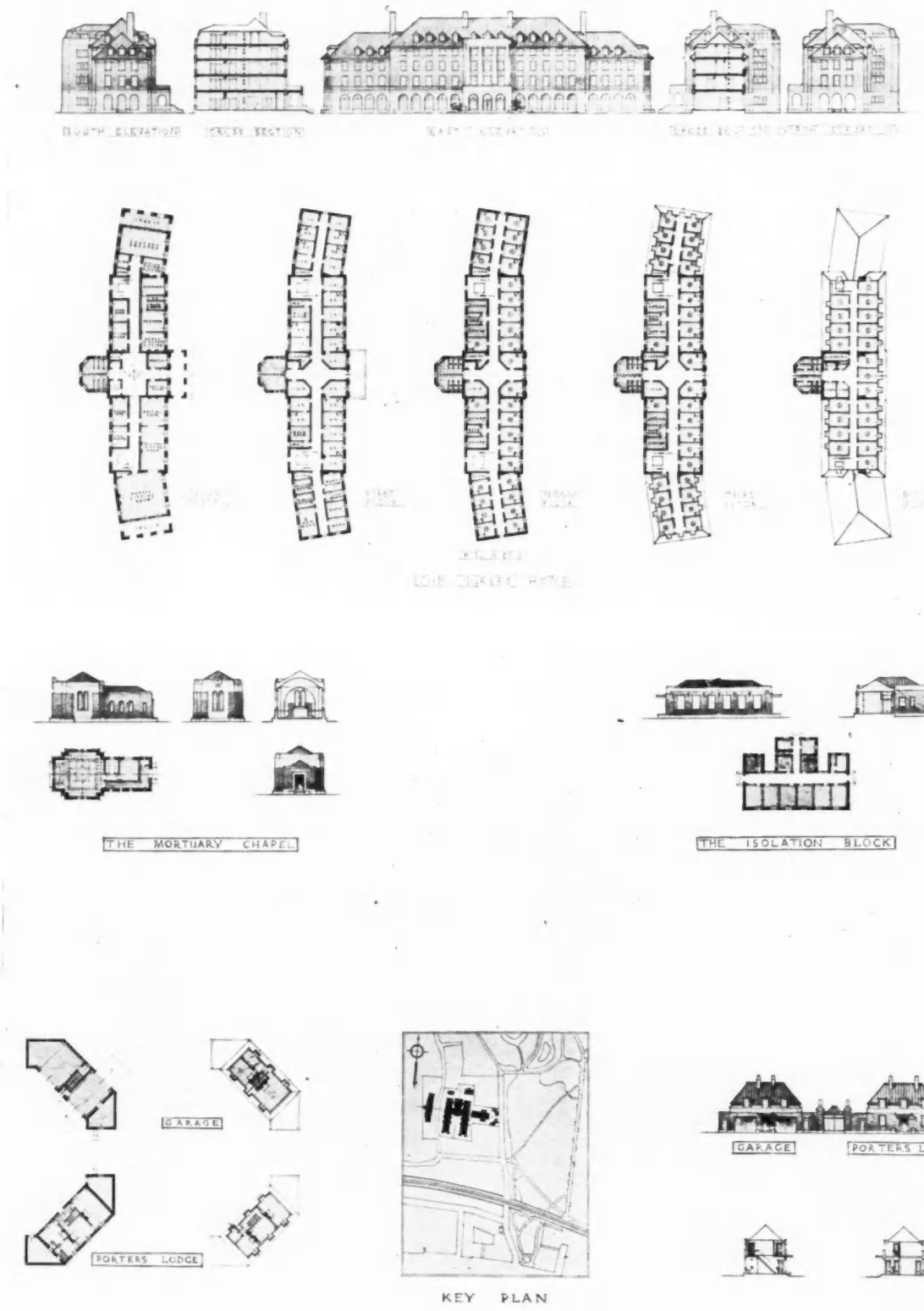


Plans of main ward block. The competition, a limited one, was promoted by the Freemasons' Hospital and Nursing Home, Chelsea.



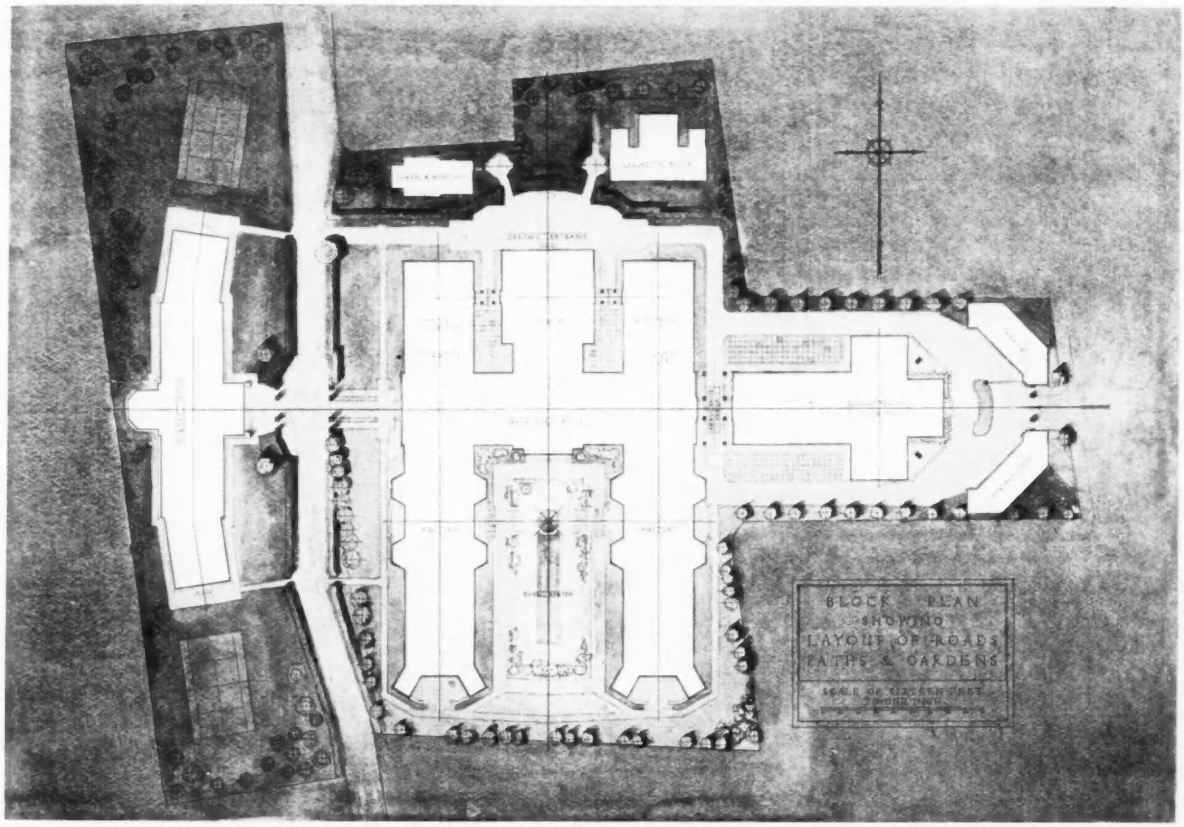
Freemasons' Hospital Competition : Winning Design. [*By Sir John Burnet and Partners.*

Main ward block ; and administrative department. The institution will be built on a site at Ravenscourt Park, London.



Freemasons' Hospital Competition: Winning Design.] [*By Sir John Burnet and Partners.*

The nurses' home, and, in the lower illustration, mortuary chapel, isolation block, garage and porter's lodge.



Freemasons' Hospital Competition: Winning Design.] *[By Sir John Burnet and Partners.*

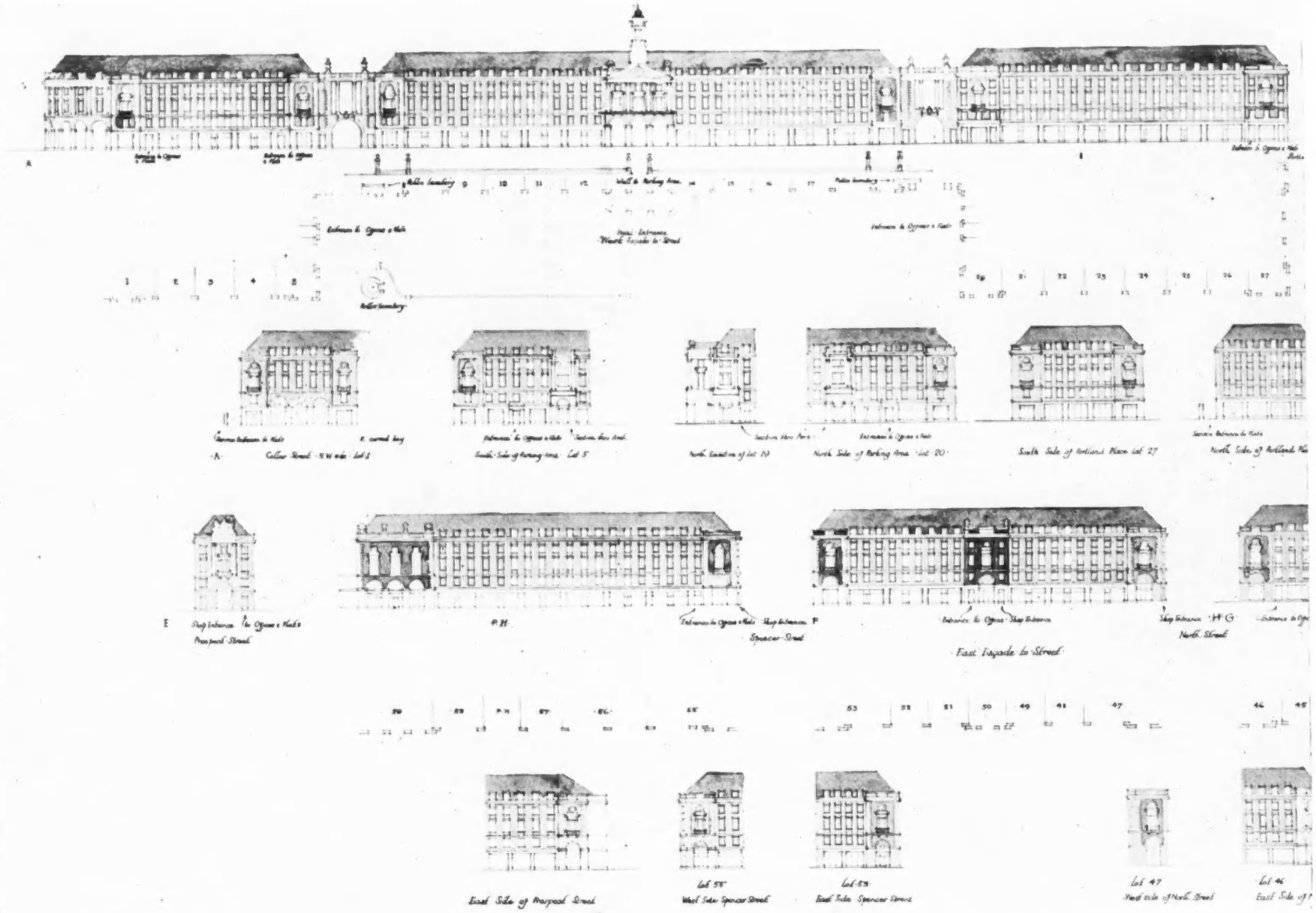
Block plan showing layout of roads, paths and gardens.

HULL STREET FAÇADES COMPETITION

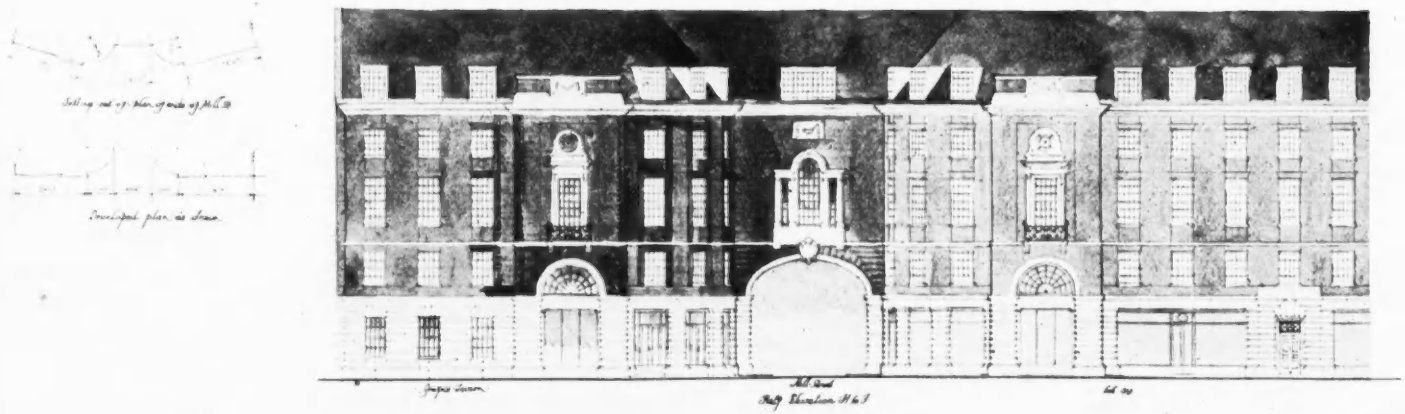
Winning Design by F. Scarlett and H. Ashworth



The hotel is designed with a triple arcaded central entrance, and a parking area for motor cars. In the wings to the left and right of the portico are entrances to offices and flats. The illustration should be studied with the drawing on pages 24 and 26.

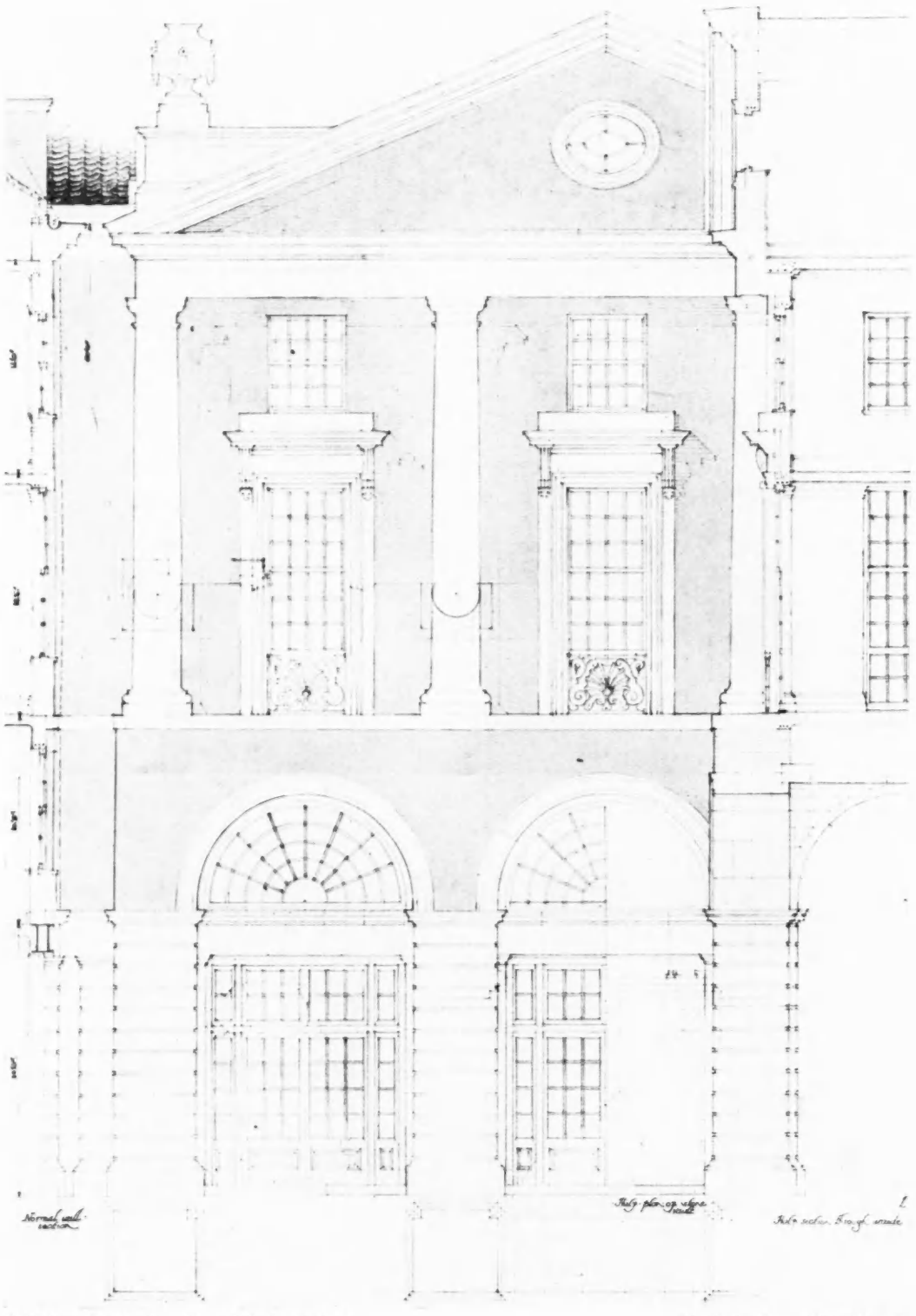

Public Lavatory
Wall & Railing Area
Entrance to Offices & Flats
Main Entrance
North Façade to Street
Collier Street
South Side of Nursing Area Lot 5
North Elevation of Lot 19
North Side of Nursing Area Lot 20
South Side of Portland Place Lot 27
North Side of Portland Pl
Prospect Street
Shop Entrance
Spencer Street
East Façade to Street
North Street
East Side of Prospect Street
Lot 58
West Side Spencer Street
Lot 59
East Side Spencer Street
Lot 47
West side of North Street
Lot 46
East Side of





Hull Street Facades Competition: Winning Design.] *[By F. Scarlett and H. Ashworth.*

The competition was assessed by Sir Reginald Blomfield, and was promoted by the Kingston-on-Hull Corporation for designs for façades of the proposed new street from Paragon Station to Beverley Road. There were thirty-nine competitors, and the awards were: First prize, £750, F. Scarlett and H. Ashworth; second prize, £350, C. A. Farey; third prize, £150, J. E. Winfield.



Hull Street Facades Competition: Winning Design.] *[By F. Scarlett and H. Ashworth.*

Detail of entrance to hotel. Sir Reginald Blomfield, in his report, says: "The design of the central feature of the hotel above the triple arcade required some consideration, and the segmental pediment in the block between Portland Place and Pearson Street would be better omitted, but in other respects the design was a very satisfactory one, and the treatment of the archways and colonnades, and the general conception of the scheme, were excellent."

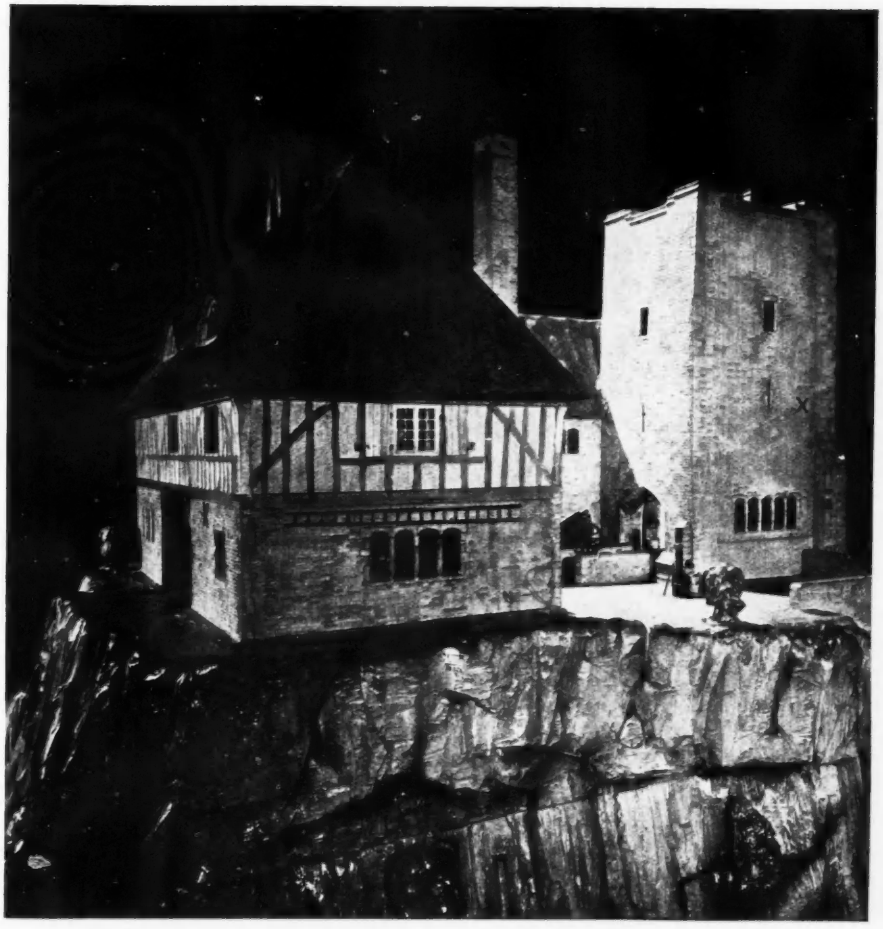
MIRROR GRANGE

DESIGNED BY MAXWELL AYRTON

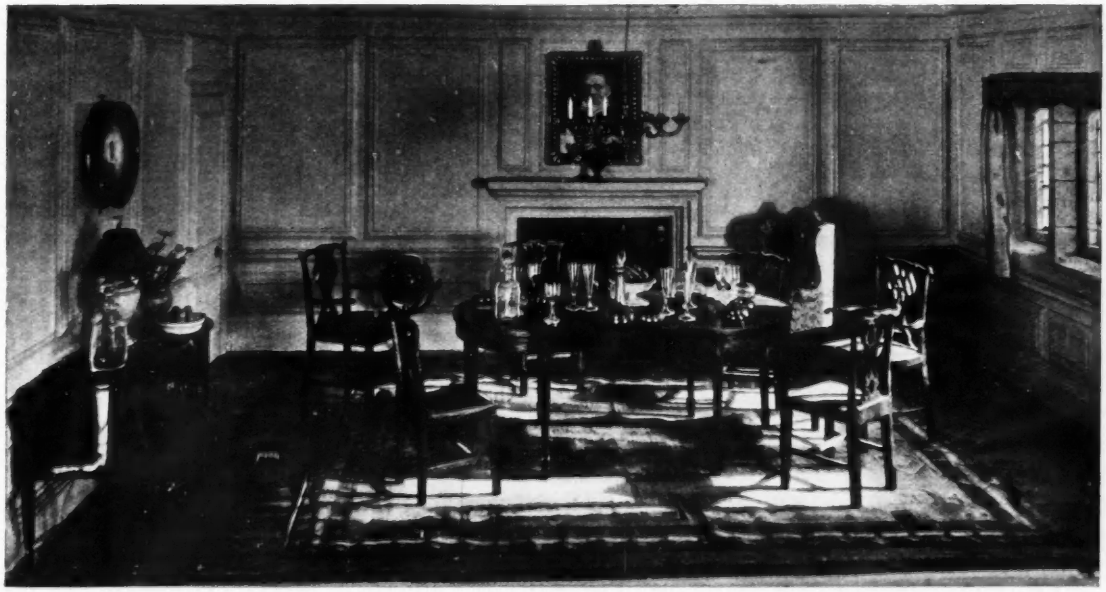
MIRROR GRANGE the miniature house designed by Mr. Maxwell Ayrton, F.R.I.B.A., for *The Daily Mirror*, was placed on exhibition at Grafton Galleries, the whole of the profits from the charges for admission being assigned to the Chailey Heritage Craft Schools.

The wall papers have been designed by Mr. George Sheringham, who also directed the painting of the model, and painted reproductions of old colour prints. Much of the actual furniture, the little ornaments, the carving of the trees, the thatched roofs, have been painted by Mr. Victor Hembrow. Mrs. Grace Lovat Fraser, assisted by Miss Stella Pearce, designed and chose the curtains, and Miss Polly Hill Clarke, the carver of wood figures, is responsible for the appointments in the nursery, such as the rocking horse.

Mirror Grange is no jerry-built affair. It is a home of cosy rooms and fascinating furniture, a striking monument to architectural imagination and British craftsmanship. The whole of the construction was carried out in the workshops of Messrs. Higgs and Hill.



The Daily Mirror's *house for Pip, Squeak and Wilfred, showing the courtyard and ancient waterpump. It is 7 ft. 6 ins. high, 8 ft. long, and 7 ft. wide.*



The Chippendale dining-room. Miniature portraits in the house include H.M. the King, by Sir Arthur Cope, K.C.V.O., R.A., shown in the illustration, H.M. the Queen, by Walter Russell, R.A., and H.R.H. the Prince of Wales, by Reginald Eves. There are also portraits of Pip, Squeak and Wilfred, by Sir William Orpen, K.B.E., R.A.

CORRESPONDENCE

OUR CO-EDUCATED ARCHITECTS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Are those most concerned with the well-being of architectural education and character really satisfied with the practice of allowing men and women students in the schools to study side by side? Would they make a change if they dared?

Architectural schools differ from residential universities in that they are self-contained; there is no outside pull, no gravitation to the masculine corporate life of a college. In the schools, from, say, 10 a.m. till 7 p.m., a seething mass of young men and women simmer together in a single pot. Occasionally, the pot boils over, but that is not the worst feature, since individual men and women always have boiled over and always will. What does matter is the inevitable debilitation wrought by propinquity, especially on the men.

The period of nineteen to twenty-four is the most vital and intense in a man's life. It coincides with a degree of susceptibility and vitality that is never touched again. Men at that age can work all day and dance all night without loss; but, put crudely, what they cannot do is to work all day, and day after day, under a constant emotional and sexual stimulus.

It is difficult to make a drastic change at once; but, without affecting a constitution, it is possible for the administration to make a start that would be really helpful. The increasing congestion in the big schools will create opportunities for rearrangement and segregation when new accommodation is secured. Separate sitting-rooms for men and women students would probably be equally appreciated by both sexes, since, contrary to the impression given by comic writers, women, as well as men, generally appreciate the company of their own sex. Certain reserved tables, in those schools that contain a restaurant, would tend in the same direction.

At present, except for the provision of separate cloak-rooms, there is nothing to indicate that the inmates are not unisexual. In short, the intention should be to make it easier for the men to keep together and for the women to keep apart. To say that such is not the natural tendency during the working periods of life is a modern and sentimental perversion of nature.

The writer of these opinions had in due humility decided to term herself "Mid-Vic."; she is, however, not so sure that she may not be prophetic rather than retrospective; and emboldened by this confidence she will face the existing *Zeitgeist* and sign herself

"1959."

SMETHWICK FIRE DISASTER

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The attention of the Council of the Institution of Electrical Engineers has been drawn to newspaper reports [not published in THE ARCHITECTS' JOURNAL] of the proceedings at the inquest, which concluded on September 25 last, upon eleven persons who lost their lives by reason of a fire at premises in Rolfe Street, Smethwick, on September 2.

Some of the evidence purported to show that the fire was due to a defective electrical installation in a neighbouring building, and in this connection one of the witnesses condemned the use of lead-covered, rubber-insulated cables for the wiring of public buildings. This statement has caused great uneasiness in the minds of consulting engineers, architects, electrical contractors and others, inasmuch as the use of lead-covered, rubber-insulated cables is permitted by, and the proper methods of installation of such cables are set out in, the "Regulations for the Electrical Equipment of Buildings" issued by the Institution. These Regulations are recognized by consulting engineers, electrical contractors, electricity supply authorities and the Fire Offices, as representing the best standard practice, and the Fire Offices in particular recommend their use.

The Council reaffirm, therefore, that they are of the opinion that lead-sheathed cables are both suitable and safe for electrical installations, if installed and maintained in accordance with the I.E.E. Wiring Regulations.

From the evidence given, as reported in the newspapers, there is every indication that the electrical installation, which, it is suggested, caused the fire at Smethwick, did not comply with these Regulations.

P. F. ROWELL,
Secretary,
The Institution of Electrical Engineers.

SOCIETIES AND INSTITUTIONS

ROYAL INSTITUTE OF THE ARCHITECTS OF IRELAND

The annual general meeting of the above Royal Institute was held in Dublin. The President, Mr. F. G. Hicks, F.R.I.B.A., who occupied the chair, read the result of the ballot for the Council for 1930, and declared the following elected: Messrs. J. J. Robinson, T. J. Byrne, G. F. Beckett, F. Hayes, R. M. Butler, H. Allberry, L. F. Giron, C. H. Mitchell, and T. F. Strahan.

In the annual report of Council, read by the Hon. Secretary, it was stated that the present membership of the Institute was constituted as follows: Thirty-six fellows, 123 members, two honorary members, seven students, and thirty-six probationers, making a total of 204. The Council decided to award a certificate for the best result at the intermediate examination, and a gold medal for the best result at the final examination. The Institute prize of fifteen guineas was again offered, and was won by Mr. Leonard Manning, with a design of a frontage to a group of shops and offices in a city of about the size of Dublin. During the session the question of awarding a medal for the best building erected was discussed, and it was decided to award a medal triennially. Conditions have been drafted and it is hoped that the first medal will be awarded in 1930. Awards or certificates for craftsmanship were also brought before the notice of the Council and the matter was referred to a Joint Consultation Board of members of the Council and members of the Master Builders' Association.

The adoption of the report was proposed by Mr. H. G. Leask, seconded by Mr. J. J. Robinson, and passed. Mr. Thomas Geoghegan was elected auditor for the coming session.

COMPETITION DESIGNS

At a general meeting of the Sheffield, South Yorkshire and District Society of Architects and Surveyors, a lecture was given by Mr. Percy Thomas, O.B.E., F.R.I.B.A., on "Competitions."

The lecturer pointed out that only by going in for competitions could the young and unknown architect, unless he had money or an established practice to step into, become known, and although objections had been made to competitions on the score of the large sums of money spent by unsuccessful competitors, he did not think that this objection was very material, as competition work was usually done in spare time and general practice was not put aside.

Mr. Thomas said that the making of finished drawings should be deferred until the latest possible stage, the competition design being studied best by means of repeated revisions on tracing paper, as it might be found that the best "motif" for the design lay in the first sketch and not in the last. Therefore, this system was preferable to the constant use of indiarubber, where no record was available of the designer's early ideas. This system also enabled judgment to be formed on the progressive development of the design.

He also emphasized the necessity of elevations being shaded, as it was extremely difficult for an assessor to judge the possibilities of light and shade on a line drawing only.

TOWN PLANNING OF THE PAST

The importance of town planning was stressed by Professor T. Harold Hughes in a lecture delivered to the members of the Royal Philosophical Society of Glasgow.

One of the earliest examples of town planning, he said, dated back some 3,000 years before Christ, and was that of Kahun, a town which was laid out for the accommodation of the builders at work on the Egyptian Pyramids. There were records of town planning of very ancient date in China and in the valleys of the Tigris and Euphrates, but the earliest important contributions came from Greece and the Greek colonies, Selinus being a well-known example.

He explained that town planning was practised in the Middle Ages. There were examples of towns laid out by barons and clerics in front of their castles or abbeys respectively, but of all examples the most interesting were the bastides planned by Edward I. in the South of France and in Wales.

In Great Britain the best-known examples of the laying out of complete towns were Bath and Edinburgh, of the eighteenth century. Of the nineteenth century the finest example was the work carried out in Paris for the Third Napoleon, a work which had influenced many countries since, notably the United States of America.

GLASGOW SCHOOL OF ARCHITECTURE

Diplomas, certificates, and prizes of the Glasgow School of Architecture were presented to a number of students at a meeting of the joint committee of the governors of the Royal Technical College and the School of Art, Glasgow.

Principal Rait, Glasgow University, addressing the students, said that he thought that architecture gave a more widely diffused pleasure to unsophisticated human beings like himself than certainly any other of the pictorial arts. Because of that fact it had always been more open to criticism than other arts, since even the unsophisticated man knew what gave him pleasure and what did not.

He congratulated them on entering the work of a profession which had become in recent years so distinguished in our own country. It seemed to him that, even within his own recollection, there had been a very great change in point of view with regard to buildings of a utilitarian character. Forty or fifty years ago it seemed to be accepted —not by architects but by the general public—that if one had to erect a building for practical purposes, the uglier it was the better, because the uglier it was, probably the cheaper it was. He thought, however, that the public was beginning to realize that a building honestly built for an honourable purpose might be, and ought to be, a beautiful building.

ARCHITECTURAL RENDERING

Mr. E. M. K. Ellerton delivered a lecture on "Architectural Rendering" to the members of the Liverpool Architectural Society.

He said that understanding of decorative form and colour was essential to architecture, and he drew a parallel between music and colour, pointing out that in both cases harmony, contrast, and discord made their contribution to the complete scheme. He urged the importance of a systematic instead of a haphazard study of colour, and by means of lantern slides and diagrams he indicated the relation of colour to architectural form and composition.

HOLIDAY LECTURES FOR BOYS AND GIRLS

The Hon. Humphrey Pakington, A.R.I.B.A., delivered the first of three Christmas holiday lectures on architecture for boys and girls at the R.I.B.A. on Monday last.

The lecturer, who took as his first subject "English Architecture—How it Began," said that there was hardly anything in this country which could be called architecture till the Romans came over here. The Britons were fairly civilized people; the south-east corner of England—that nearest to the mainland of Europe—had been prosperous and well populated hundreds of years before Cæsar came.

With the aid of lantern slides, he explained how, while the Roman was building great palaces and temples of marble and stone, great lawcourts and theatres and aqueducts and triumphal arches, the Briton was digging himself into the earth to live in, or making himself a little hut of wickerwork, smeared over with plaster.

Mr. Pakington showed on the screen many different styles of architecture, which helped his explanation tremendously, and the rapt attention of the listeners showed how they enjoyed it.

STAINED GLASS WINDOWS

The Council of the British Society of Master Glass-Painters have had under consideration the methods and practice of inviting competitive designs for stained glass windows.

They state that (1): the form in which designs for stained glass windows are submitted gives very little indication of what the finished window will be, and in some cases may prove misleading, for the same design can be executed in glass by several artists with wholly different results. Stained glass, perhaps more than any other craft, depends for its beauty upon the quality of the material and the brilliance and setting of the actual coloured glass used in making the window. On such points a watercolour design can give small guidance, while the sketches usually submitted are inadequate to represent the full-scale cartoon, especially as regards the character and expression of faces.

2: Competitions on such lines, therefore, may in themselves be inadequate for making the best choice; better prospect of success will be secured if competitors are offered a fee.

It is also desirable that the money available for a window should be made known to each competitor. The information is serviceable to the artist and helps to produce equality in the terms of competition.

The Norsdon Football Club

The male staff of Messrs. North, Robin and Wilsdon, of Townsend House, Greycoat Place, Westminster, S.W.1, the London architects, have organized between themselves a football and social club, to be known as the Norsdon Football Club, under the captaincy of Mr. F. J. Woollard, the office accountant. The project has been enthusiastically and materially supported by the partners of the firm, who have provided the club with playing fields and colours; the latter, green jerseys with white shorts, have a green, white and red badge, designed by Mr. W. H. Ford, the chief draughtsman, incorporating the tools of their craft—set squares and compasses. Although the recent weather has been unfavourable for play, the team has turned out several times and shown considerable promise. The captain has arranged some matches with other teams for the New Year, including the following, but will welcome challenges from any other clubs for vacant Saturday afternoons:—

Jan. 4th .. Vacant.
,, 11th .. Edmundson's.
,, 18th .. Express Lift Co.
,, 25th .. Hillier, Parker, May & Rowden.
Feb. 1st .. Eclipse F.C.
,, 8th .. Vacant.
,, 15th .. Express Lift Co.
,, 22nd .. Vacant.
Mar. 1st .. Vacant.
,, 8th .. Vacant.
,, 15th .. Watson House Sports Club.
,, 22nd .. Vacant.
,, 29th .. Vacant.

Publication Received

Building Science Abstracts: Vol. II (New Series), No. 11, November, 1929. Abstracts Nos. 2217–2443. Compiled by the Department of Scientific and Industrial Research Building Research Station, and published in conjunction with the Institute of Builders. H.M. Stationery Office. Price 9d. net.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

Lieutenant-Colonel Fremantle inquired if the attention of the Minister of Health had been called to the development of certain properties in the West End, such as the sites of Grosvenor House and Devonshire House, Westminster, and Hereford Gardens, near Marble Arch, whereby large new populations were housed without regard to the traffic capacity of the serving streets; and when he proposed to introduce legislation to enable developed areas to be replanned and the population to the acre limited.

Mr. Greenwood replied that he was aware generally of the type of development referred to. He hoped in due course to introduce legislation for extending town-planning powers to developed areas.

Mr. Greenwood informed Mr. Gill that, according to the information available in his Department, the average price paid for housing sites by local authorities was approximately £200 per acre.

Mr. Leif Jones asked the Minister of Health whether, in view of the failure of county councils adequately to administer the Housing (Rural Workers) Act, 1926, and of the fact that applications for assistance would cease to be entertained after 1931, he proposed to take any further steps to improve the condition of rural housing, or to secure more energetic administration of the Act.

Mr. Greenwood said that as regarded the Act of 1926 he was prepared, as he had been in the past, to consider any representations that special circumstances existed in any particular case which would justify him in declaring that the Council of the County District should be the local authority for the purposes of the Act. As regarded wider measures for the improvement of rural housing, he would ask Mr. Leif Jones to await the introduction of the housing legislation which was now in preparation

Miss Lawrence, in reply to Mr. Mills, said that the Minister hoped to introduce legislation extending town-planning powers to built-up areas.

Lt.-Col. Moore, a Scottish Unionist member, introduced into the House of Commons the Architects' Registration Bill. The measure, however, in view of the congestion of Parliamentary business, had no chance of becoming law last Session.

Miss Susan Lawrence informed Sir J. Power that the number of houses completed under the Housing Acts of 1923 and 1924, during the three months ended November 30, 1929, was 46,039. During the corresponding months of 1928 the number was 32,090.

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, general contractors, and some of the sub-contractors for the buildings illustrated in this issue :

Kemsley Club House (pages 6–12). General contractors, E. Bishop and Sons, Ltd. Sub-contractors : Trussed Concrete Steel Co., Ltd.,Hy-Rib construction; Crittall Manufacturing Co., Ltd., metal window frames; Gloucester Concrete Construction Co., Ltd., artificial stone; Braithwaite & Co., Engineers, Ltd., steelwork; Haywards, Ltd., heating; Birmingham Guild, Ltd., ornamental ironwork; Richard Anderson & Co., lightning conductor; Minimax, Ltd., fire extinguishers; Doulton & Co., Ltd., sanitary goods; Edmundsons Electricity Corporation, Ltd., electric light; Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt; H. H. Martyn & Co., Ltd., ornamental plaster; Farrow and Jackson, Ltd., beer pipes and engine; Wiggins & Co. (Hammersmith), Ltd., roofing; The Wilfley Co., Ltd., oak and marbolith flooring; N. F. Ramsey & Co., Ltd., ironmongery; Express Lift Co., Ltd., lift; Roberts, Adlard, & Co., tiles; Heal and Son, Ltd., furniture and hangings.

New County Offices, Aylesbury, Bucks (pages 17–19). Specialists : Consulting engineer for heating, T. J. R. Kiernan, B.SC.; quantity surveyors, Baker and Mallett, F.F.S.I.; general foreman, G. Bignell. General contractors, Webster and Cannon, who were also responsible for the counter and other joinery fittings. Sub-contractors : Trussed Concrete Steel Co., Ltd., reinforced concrete floors, main staircase and Hy-Rib metal lathing; Empire Stone Co., Ltd., stone dressings, service stairs and other artificial stonework; Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt work; Crittall Manufacturing Co., Ltd., steel windows and enamelled county crest; Hollis Bros. & Co., Ltd., Tasmanian oak block flooring; The Wilfley Co., Ltd., marbolith jointless flooring in caretaker's quarters; Diespeker & Co., Ltd., terrazzo work; Braithwaite & Co., Engineers, Ltd., steel roof trusses; Henry Hope and Sons, Ltd., patent roof glazing; Brightside Foundry and Engineering Co., Ltd., heating and hot water installation; Express Lift Co., Ltd., passenger lift; James Gibbons, Ltd., strong room doors and grille; E.S. Mackrill and Sons, electric light, buzzers and private telephones; Hill and Smith, Ltd., wrought-iron fencing; N. F. Ramsay & Co. (London), Ltd., lift enclosure, letter chute, ironmongery, bronze commemoration and direction plates; H. H. Martyn & Co., Ltd., oak panelling and decorative plastering; Shanks & Co., Ltd., and Doulton & Co., Ltd., sanitary fittings; Waring and Gillow, Ltd., general furniture; Hughenden Chair and Furniture Works, Ltd., W. Birch, Ltd., and R. Tyzack, Ltd., chairs; F. Parker & Co., Ltd., furniture for committee rooms; Pyrene Co., Ltd., fire extinguishers; V. Robinson, curtains and rods.

House, 21 West Heath Avenue, N.W.11 (pages 12–14). General contractor, Welwyn Builders, Ltd., who were also responsible for the electric wiring, electric light fixtures, electric heating, ventilation, plumbing and joinery. Sub-contractors : Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt; Stirling and Johnson, Ltd., tiles; Fram Reinforced Concrete Co., Ltd., patent flooring; J. Wontner-Smith, Gray & Co., Ltd., central heating; Teale Fireplace Co. (London), Ltd., grates; Beeston Boiler Co., boilers; John Bolding and Sons, Ltd., sanitary fittings; A. E. Davis, door furniture and window furniture; Crittall Manufacturing Co., Ltd., casements; G. Jackson and Sons, Ltd., decorative plaster; G. Hobbs and Son, wrought-iron entrance gate; H. T. Jenkins and Son, Ltd., marble surrounds and hearths; Carter & Co. Ltd., tiling; Silical Water Softeners, Ltd., water-softening plant.

House at Cambridge (pages 32–33). Garden layout designed by Christopher Smithells, Watford. General contractors, Arthur Negus and Sons. Sub-contractors : G. M. Callender and Co., Ltd., Led-Kore dampcourses; Bratt Colbran & Co., Ltd., grates; Osler and Faraday, Ltd., and Negus Electrical Co., electric light fixtures; H. Pontifex and Sons, sanitary fittings; A. E. Davis, door furniture; Crittall Manufacturing Co., Ltd., casements; Dry-tone, Ltd., doors.

NEW INVENTIONS

The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full published specifications here enumerated, readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.

LATEST PATENT APPLICATIONS

38044. Bourdelles, L. Building construction. December 11.

37982. Clark, L. Apparatus for fixing roofing slates, etc. December 11.

38214. Clark, L. Method of fixing slates, tiles, etc. December 13.

37889. Fife, C. W. Reinforced concrete structures. December 10.

37844. Lewenstein, A. S. Wood flooring, etc. December 10.

SPECIFICATIONS PUBLISHED

322529. Cook, W. Fencing and wall structures.

322560 Spencer, Ltd., J., and Spencer, Sir T. H. Means for connecting tubular scaffolding and other tubular structures.

313163. Junkers, H. Scaffolding devices for use in assembling structures.

ABSTRACT PUBLISHED

321055. Floors. Trumpy, E.

THE ARCHITECTS' DIARY

WEDNESDAY, JANUARY 1, 1930

R.I.B.A., 9 Conduit Street, W.1. Second of three Christmas holiday lectures for boys and girls. "English Architecture—How it Grew." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Metalwork." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

THURSDAY, JANUARY 2

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "English Sculpture." By T. F. Wilson, F.R.S.A.I. "Italian Sculpture." By T. F. Wilson, F.R.S.A.I. 7 p.m. **3 p.m.**

FRIDAY, JANUARY 3

R.I.B.A., 9 Conduit Street, W.1. Last of three Christmas holiday lectures for boys and girls. "English Architecture—What it Means." By the Hon. Humphrey Pakington, A.R.I.B.A. **3.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early English Furniture." By T. F. Wilson, F.R.S.A.I. 12 noon. "Far Eastern Pottery." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

SATURDAY, JANUARY 4

Sunrise, 8.6 a.m. Sunset, 4.4 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Indian Section: "Architecture." By T. F. Wilson, F.R.S.A.I. **3 p.m.**

MONDAY, JANUARY 6

SOCIETY FOR THE PROTECTION OF ANCIENT BUILDINGS AND THE NATIONAL TRUST. At the Royal Society of Arts, John Street, Adelphi, W.C. "Windmills in Holland." By Jan den Tex. (Lantern illustrations). Also "The Development of the Windmill." By R. Wailes. A. R. Powys will preside. **8 p.m.**

TUESDAY, JANUARY 7

R.I.B.A., 9 Conduit Street, W.1. Annual Exhibition of Designs and Drawings submitted for the Prizes and Studentships 1930 till Monday, January 20. The Exhibition will be open daily (Sundays excepted), free to the public between the hours of 10 a.m. and 8 p.m. (Saturdays 5 p.m.). **10 a.m.**

WEDNESDAY, JANUARY 8

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Regional Planning with special reference to Greater London." By Dr. Raymond Unwin, F.R.I.B.A. Award of Prizes and Studentships. **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Regional Planning in S.W. Lancashire." By T. Pierson Frank, M.INST.C.E., F.S.I. **8 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. "Observations on Flue Equipment, &c." By C. A. Masterman, B.A., A.I.C., M.S.C.I., M.S.I.E **7 p.m.**

THURSDAY, JANUARY 9

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "The Work of the Building Research Station." By Dr. R. E. Stradling, D.SC., PH.D. **8 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Modern Design and Decoration." By Howard Robertson, F.R.I.B.A., S.A.D.G. (Lantern Illustrations.) **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C. 2. Ordinary Meeting. 6 p.m. Dundee Sub-Centre. At the University College, Dundee. "Lubrication." By G. H. Chalmers, 7.30 p.m. **6 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Engineering Contracts, some legal problems affecting Structural Engineers." By E. J. Limner, M.ENG., A.M.INST.C.E. **6.30 p.m.**

SATURDAY, JANUARY 11

Sunrise, 8.3 a.m. Sunset, 4.13 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C. 1. First of Series of Six Non-Technical Lectures on Present Day Architecture. "Architecture in Daily Life." By Howard Robertson, F.R.I.B.A., S.A.D.G. **3 p.m.**

MONDAY, JANUARY 13

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Western Centre. Annual Dinner (at Cardiff).

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, S.E. 1. Paper on "Oil versus Solid Fuels." By N. A. Seabeater. Light refreshments at 6.30 p.m. **7 p.m.**

TUESDAY, JANUARY 14

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the North British Station Hotel, Edinburgh. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. **7 p.m.**

WEDNESDAY, JANUARY 15

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C. 2. Ordinary Meeting. "Quality in Pottery." By Joseph Burton, A.R.C.SC.I. Professor H. E. Armstrong, PH.D., LL.D., D.SC., F.R.S., will preside. **8 p.m.**

THURSDAY, JANUARY 16

INSTITUTION OF ELECTRICAL ENGINEERS. Hampshire Sub-Centre. At University College, Southampton. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. **7.30 p.m.**

FRIDAY, JANUARY 17

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Smoking Concert to be held at Carr's Restaurant, 264 Strand, W.C. Tickets may be obtained from the Secretary.

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. "London's Parks and Open Spaces." By F. W. Parker, F.S.I. **5 p.m.**

SATURDAY, JANUARY 18

Sunrise, 7.57 a.m. Sunset, 4.24 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C. 1. Visit to Tower Bridge. Meet at Superintending Engineers' Office, Tower Bridge, at 2.30 p.m. **2.30 p.m.**

UNIVERSITY COLLEGE, Oxford. Conference in the Hall. The Rt. Hon. H. A. L. Fisher, F.R.S., P.B.A., will preside. Exhibition of drawings by P. Wilson Steer, Sir Charles Holmes and Gilbert Spencer, open from 2 p.m. Tea 4.30 p.m. **2 p.m.**

MONDAY, JANUARY 20

R.I.B.A., 9 Conduit Street, W. 1. General Meeting. President's Address to Students. Criticism by Louis de Soissons, O.B.E., F.R.I.B.A., on work submitted for Prizes and Studentships. Presentation of Prizes. **8.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. South Midland Centre. At the University, Edmund Street, Birmingham. "Voltage Control of Large Alternators." By H. W. Taylor. **7 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C. 2. Cantor Lecture. Harold J. L. Wright, of Messrs. P. and D. Colnaghi & Co., on "Three Master Etchers: Rembrandt, Meryon, Whistler." (Lecture I.). **8 p.m.**

TUESDAY, JANUARY 21

INSTITUTION OF ELECTRICAL ENGINEERS. East Midland Sub-Centre. At the College, Loughborough. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." **6.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W. 7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon.**

WEDNESDAY, JANUARY 22

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Architectural Lighting." By R. W. Maitland. **8 p.m.**

THURSDAY, JANUARY 23

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C. 1. At Birmingham. "Modern Improvements in Resistance Welding Machines." By C. A. Hadley.

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W. 1. "Setting out and erection of Multiple Storey Buildings." Informal Discussion to be opened by G. F. C. Caswell. **6.30 p.m.**

SATURDAY, JANUARY 25

Sunrise, 7.50 a.m. Sunset, 4.36 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C. 1. Second of Series of Six Non-Technical Lectures on Present Day Architecture. "The House You Want." By R. Randal Phillips, Hon. A.R.I.B.A. **3 p.m.**

MONDAY, JANUARY 27

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C. 1. "Some Aspects of Contemporary Continental Decoration." (Lantern Illustrations.) By J. M. Holmes. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C. 2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." By Harold J. L. Wright. (Lecture II.). **8 p.m.**

MONDAY, FEBRUARY 3

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C. 2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." By Harold J. L. Wright. (Lecture III.). **8 p.m.**

THURSDAY, FEBRUARY 6

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual Dinner at the Hotel Cecil, Strand, W.C.2. 7 p.m. for 7.30 p.m. **7.30 p.m.**

SATURDAY, FEBRUARY 8

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Third of a series of six Non-Technical Lectures on Present-Day Architecture. "The Creation of a Garden City." By Louis de Soissons, O.B.E., F.R.I.B.A., S.A.D.G. **3 p.m.**

MONDAY, FEBRUARY 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "The Thames Valley Preservation Scheme." By Professor Patrick Abercrombie, M.A., F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. Lecture I. **8 p.m.**

WEDNESDAY, FEBRUARY 19

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. Cantor Lecture. "Alfred Stevens: Architect-Sculptor-Painter." **8 p.m.**

SATURDAY, FEBRUARY 22

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Fourth of a Series of Six Non-Technical Lectures on Present-Day Architecture. "Decoration and Furnishing." By G. G. Wornum, F.R.I.B.A. **3 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BARKING U.D.C. has accepted the surveyor's estimate of £57,000 for the erection, by direct labour, of 114 houses on the Utney estate.

The Teachers' Training and Registration Society is to enlarge the Maria Grey training college and the BRONDESBURY and KILBURN High School, at a cost of £20,000.

The Middlesex C.C. is to contribute £25,000 towards the cost of the reconstruction of the bridge carrying Hanger Lane over the Great Western Railway Company's lines at EALING.

Plans passed by the HORNSEY Corporation: Conversion of 18 to 21 Firs Parade, Fortis Green Road, into four shops, for Messrs. Murrell and Pigott; alterations and additions, 17 High Street, for Messrs. Malcolm Burr and Sweeney; two houses, Wood Vale, for Messrs. Smerdon Bros.; alterations and additions, 63 Hornsey Park Road, for Mr. H. J. Heath.

Mr. F. Smith is to erect seventy-two houses and garages on the Wangeyhall estate, High Road, ILFORD.

The ILFORD Corporation Health Committee has approved plans and estimate of £39,761 for extensions at the Isolation Hospital.

The ILFORD Corporation Housing Committee has asked the borough surveyor to prepare plans for the erection of 120 houses on a site abutting on Tomswood Hill and Fencepiece Road.

The ILFORD Corporation Electricity Committee has approved plans of the proposed new offices and central show and storerooms on the Clerk's Road site, and has authorised the town clerk to seek sanction from the Electricity Commissioners to borrow £31,756, the estimated cost of the work.

Plans passed by the ILFORD Corporation: Fourteen houses, Danehurst Gardens, for Mr. W. Millner Knight; six houses, Roll Gardens and Gaysham Avenue, for Suburban Developments, Ltd.; thirty-six houses, Horace Road, for Mr. E. Meredith; six garages, rear of Beehive Lane, for Mr. W. Longworth; three shops and houses, Cranbrook Road, for Mr. G. Hamblin Fox; forty-three houses, Middleton Gardens, for Suburban Developments, Ltd.; seventeen houses, Glenwood and Kenwood Gardens, for Mr. A. Smith; alterations, twelve shops and houses, Eastern Avenue, for Mr. J. A. Dartnall; shop and house, Green Lane, for Mr. F. C. M. Young; fifteen shops, Longbridge Road, for Mr. E. Meredith; roads and sewers, Grove Road estate, for Mr. P. Triplete; additions, Metropolitan Cable Works, Grove Road, for Mr. F. Smith; three houses, Suffolk Road, for Mr. W. H. Lewis; twenty-two houses, Eastern Avenue, for Mr. J. Aldridge; twenty-four houses, Fencepiece Road, for Messrs. Haines and Warwick, Ltd.; five bungalows, Woodford Bridge Road, for Mr. T. Anders; twenty-eight houses, Roxy Avenue, for Messrs. P. Triplete, Ltd.; shop, Station Approach, for Mr. H. Tanner; thirty-seven houses, Charter Avenue, for Mr. J. W. Lohden; sixteen houses, Lyndhurst Gardens, for Seymour Construction Co.; twenty-four houses, Woodford Avenue, for Mr. T. Anders; six houses, Campbell Avenue, for Mr. H. W. Christophers; factory, High Road, Chadwell Heath, for Mr. A. G. Luton; seven houses, Lincoln Gardens, for Mr. A. P. Griggs; fifteen shops and houses, Longbridge Road and Becontree Avenue, for Mr. E. Meredith; two houses, South Park Road, for Mr. G. Cushing.

Mr. William Atkinson has purchased land bounded by Willesden Lane, Western Avenue and Leamington Park, NORTH ACTON, for the purpose of houses or flats, shops or business premises, or for factories.

The POPLAR B.C. is to prepare reconstruction schemes for the following areas: Collins Place, Commodore Court, Silver Lion Court and Providence Cottages.

Plans passed by the WANDSWORTH B.C.: Garage and offices, Blackshaw Road, for Mr. R. A. C. Churchward; eight houses, Parkthorne Road, Clapham, for Mr. F. H. Hooper; boiler house and alterations, 51–7 Garratt Lane, for Messrs. Cocks and Filbey; nine houses, Gressenhall Road, for Mr. A. G. Jenkins; alterations and additions, 67–87 Aslett Street, Southfield, for Wholesale Wine Distributors, Ltd.; additions, printing works of Messrs. Percy Baker & Co., St. Ann's Hill, Fairfield, for Messrs. T. & J. Plumridge.

SOUTHERN COUNTIES

Plans passed by the BEXHILL Corporation: House, Cooden Drive, for Mr. J. E. Maynard; house, Holmesdale Road, for Mr. G. Cash; house, Westville Road, for Mr. F. J. Tomline; house, Cooden Drive, for Mr. E. Bunce; house, Havelock Road, for Mr. Lye; additions, 26 Sea Road, for Messrs. Bainbridge and Son.

Plans passed by BOURNEMOUTH Corporation: Additions, Linden Hall, Christchurch Road, for the Exton Hotels, Ltd.; additions and alterations, The Overcliffe Hotel, Grand Avenue, for Messrs. R. and M. Foulsham; alterations, 8–10 Palmerston Road, for Messrs. L. and E. Avery; alterations, Branksome Dene Hotel, Alumhurst Road, for Mr. G. A. Dunn; bakery, Cleveland Road, for P. and B. Co-op.; alterations, 627–9 Christchurch Road, for the International Tea Co. Stores, Ltd.; additions, Marsham Court, Russell Cotes Road, for Mr. A. J. Marsh; alterations and additions, Southbourne School, Herberton Road, for Miss G. Greaves; bakehouse, Charminster Road, for Mr. S. G. Ward; shops, showrooms and offices, Westover Road, for Mr. W. Hayward; two bungalows, Brockenhurst Road, for Mr. S. G. Ward; four houses, Elmes Road, for Mr. H. Stanton; flats, Rutland Road, for Mr. M. Loader; eighteen houses, Seafield Road, and twelve houses, Covena Road, for Messrs. M. Brown and Sons; bus and coach station, The Square, for the Hants and Dorset Motor Services, Ltd.; two shops and houses, Castle Lane, for Messrs. Keane and Son; alterations, Boys' Home, Talbot Avenue, for the Committee; five houses, Covena Road, for Mr. S. Kermode; three houses, The Avenue, for Messrs. S. Harris and Son; motor-coach station, 10 Christchurch Road, for Bournemouth Motor Station, Ltd.; three houses, St. Clement's Road, for Mr. H. Smith; three houses, Nursery Road, for Mr. F. E. Smith.

The DOVER Corporation has instructed the borough engineer to report as to the approximate cost of erecting a fire station on the front of the Corporation depot in Ladywell.

EASTERN COUNTIES

Mr. T. H. Lambert is to erect fifteen houses at Kirkley Run, LOWESTOFT.

MIDLAND COUNTIES

The BIRMINGHAM Education Committee has obtained a site on the Warren Farm housing estate for the erection of an elementary school.

The BIRMINGHAM Corporation has acquired land for a housing scheme on the Wheelwright estate, Erdington.

Plans passed at BURSLEM: Six houses, High Lane, for Messrs. J. H. Broadhurst and Sons; kilns and potters' shop, Fountain Place Works, for Mr. E. Tatton; additions, Sneyd Pottery Albert Street, for Messrs Smith and Owen; six houses, Sneyd Street, for Mr. J. Jackson; pavilion, Grange Lane, for Cobridge Gospel Mission; two houses, Penrhyn Avenue, for Mr. P. Hollins; alterations and additions, Dale Street, for Marsden Tile Co.

Plans passed at HANLEY: Alterations, "Wheatsheaf Inn," Broom Street, for Showells Brewery Co.; alterations and additions, Capitol Cinema, for Associated British Cinemas, Ltd.; house, Grafton Street, for Mr. H. Burdon; additions, Trinity Street and Foundry Street, for Staffs Sentinel, Ltd.; two houses, Smith Street, for Mr. J. Ball; additions, Nelson Pottery, for Messrs. E. Cotton, Ltd.; alterations and additions, Eastwood Works, Lichfield Street, for Messrs. J. & G. Meakin, Ltd.; warehouse, etc., Charles Street, Pottery, for Messrs. Johnson Bros. (Hanley), Ltd.; alterations, 28 Piccadilly, for Modern Wallpapers, Ltd.; alterations and additions to abattoir, Lord Street, for Messrs. Palmer and Sons.

The STOKE-ON-TRENT Corporation is to culvert the brook on the Carmountside estate at a cost of £11,500.

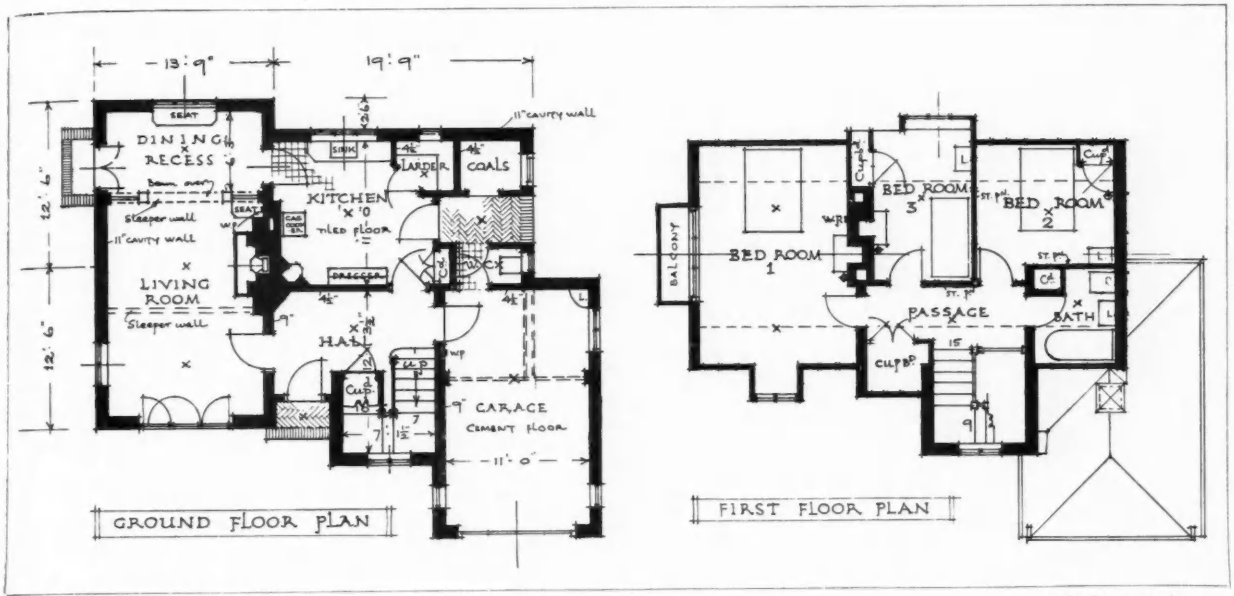
The STOKE-ON-TRENT Corporation is considering the layout of land at Little Chell Lane, Tunstall. The borough engineer reports that it is possible to erect not less than 150 houses.

Plans passed by STOKE-ON-TRENT Corporation: Store, Shelton Old Road, for Messrs. Brayshaws (Stoke), Ltd.; two houses, Newcastle Street, for Messrs. Till; extensions, Tuscan Works, for Messrs. R. H. and S. L. Plant, Ltd.; shop, High Street, for Messrs. W. T. Copeland and Sons; two houses, Weston Road, Meir, for Messrs. Foreman and Thorley; alterations, "Plough Inn," Anchor Road, Longton, for Messrs. Ind, Coope & Co., Ltd.; three houses, Allerton Road, Trentham, for Messrs. T. Horwill & Co.; two houses, Milton Road, Sneyd Green, for Mr. B. S. Phillips; oil depot, King Street, Fenton, for Anglo-American Oil Co., Ltd.; shop premises, High Street, Hanford, for Burslem and District Co-op. Society, Ltd.; layout of estate at High Lane, Chell, for Chatterley Whitfield Colliery Co.; layout of land at Henley Road, Sneyd Green, for Messrs. Shenton Bros.; layout of estate, Holly Bank, for Mr. E. Kinson; layout of estate, Longton Road, Trentham, for Mr. C. W. Ball.





House, Huntingdon Road, Cambridge. Designed by Laurence Angus. The main front (left) and a view from the south (right). The walls are of brick, and metal casement windows have been fitted. The roof is covered with tiles. For plans of the ground and first floors see page 33



House, Huntingdon Road, Cambridge.] [*By Laurence Angus.*

Ground- and first-floor plans. The entrance hall gives on to the living-room, kitchen and garage. Lavatory accommodation is provided on the left of the tradesmen's entrance, which leads direct to the kitchen; both are floored with tiles. The garden layout was designed by Christopher Smithells. For photographs, see previous page.

NORTHERN COUNTIES

The Durham County Education Committee is seeking sanction to borrow £6,500 for remodelling and enlarging the Ravensworth Terrace school, BIRTLEY.

The BLYTH Corporation Housing Committee is considering the acquisition of land in Hodgsons Lane for the erection of additional houses.

The BLYTH Education Committee has authorized the borough engineer to prepare plans for the provision of a mixed school for 180 children.

At a meeting of the BLYTH Corporation Water Committee, the borough engineer submitted plans (which the Committee recommends be approved) and estimates for waterworks at Horton, embracing a reservoir, caretaker's house, meter house and pipe lines, the cost of which he estimated, including the land, to be £41,500.

The Cheshire Education Committee has voted £9,750 for the erection of an elementary school at CHEADLE ETCHELLS.

The CHESHIRE Education Committee has voted a revised estimate of £21,500 for the erection of the proposed elementary school for the Kingsley and Newtown districts.

The Cheshire Education Committee has voted a revised estimate of £16,000 for the proposed council school at KELSALL.

The Cheshire Education Committee has obtained sanction to a loan of £17,000 for the erection of an elementary school at MARPLE.

The GRIMSBY Corporation is to construct sewer outfall works at the docks at a cost of £27,339.

The MORECAMBE Corporation is to prepare a general comprehensive scheme for the development of the Old Harbour.

The MORECAMBE Corporation has asked the borough engineer to prepare plans for the development of the Poulton Hall site, with offices and conveniences, and for a central bus station.

The MORECAMBE Corporation has approved a comprehensive scheme of development of the foreshore from Bare to the cliffs at Heysham, and the purchase and development of land, the whole scheme to be accepted as a settled policy of development to be carried out over a period of years.

Plans passed by the MORECAMBE Corporation: Two houses, Balmoral Road, for Messrs. F. Moore & Co.; addition to Hotel Metropole, Heysham Road, for Mr. A. W. Waterfall; bungalow, Mossgate Road, for Mr. S. Byrom; layout of thirty-three houses, off Fairfield Road, for Mr. F. Obank; two bungalows, Lancaster New Road, for Mr. R. W. Bigland; four houses, New Street, off Westgate, Warley Drive, for Mr. S. G. Oldham; two houses, Acre Moss Lane, for Messrs. Naylor and Robinson.

The Northumberland County Council is seeking sanction to borrow £94,750 for the purpose of land for and the extension of the existing county offices at the Moothall, NEWCASTLE-ON-TYNE.

The NOTTS C.C. is to erect a bridge over the level crossing at Checkerhouse, at an estimated cost of £25,000.

The SHIPLEY U.D.C. has acquired sites at Windhill for the erection of houses.

The Ministry of Health has sanctioned the proposal of the SHIPLEY U.D.C. to acquire housing sites at Busy Road and Carr Lane.

Plans passed by the TYNEMOUTH Corporation: Two bungalows, Wansbeck Avenue, Cullercoats, for Mr. W. Stockdale; two houses, Highbury Place, North Shields, for Messrs. Hays and Gray; two houses, Highbury Place, North Shields, for Messrs. F. R. N. Haswell and Son; motor house to shop premises, St. George's Road, Cullercoats, for Mr. J. R. Wallace; alterations to shop premises, St. George's Road, for Messrs. Bamford, Hill & Co.; extensions to canning factory, Brewers Bank, North Shields, for Mr. A. K. Taskers, on behalf of the Shields Ice and Cold Storage Co., Ltd; alterations, "Northumberland Arms" public-house, Bedford Street, North Shields, for Messrs. J. Oswald and Son, on behalf of Newcastle Breweries, Ltd.; alterations and additions to bank premises, corner of Bedford Street and Wellington Street, for Messrs. Dixon and Bell, on behalf of Martin's Bank, Ltd.; amended layout, Hawkey's Lane Estate, North Shields, for Messrs. F. R. N. Haswell and Son, for Messrs. J. W. and D. Brannen.

The WYTHENSHAW (Manchester) Estate Development Committee of the Manchester Corporation has decided to give instructions for the layout to be prepared on the estate for 10,000 working-class houses which the Corporation has decided to build at a cost of £4,000,000.

WALES

The SWANSEA Education Committee has received sanction to borrow £19,367 for extensions to the technical college.

The SWANSEA Education Committee has approved plans of the borough architect for the erection of a school for 180 children at Cockett, the cost of which he estimated to be £16,500.

The SWANSEA Corporation is to lay out nineteen acres of land acquired for the purposes of a recreation ground at Ravenhill, at an estimated cost of £12,800.

The SWANSEA Corporation Housing Committee recommends the Corporation to proceed with the erection of a further 1,500 houses to be constructed during the next four to five years; such houses to be erected by direct administration or contract. It also recommends the borough architect to prepare a scheme for the provision of 100 flats and the borough estate agent to report as to suitable sites for the erection of flats or tenements.

Plans passed by the SWANSEA Corporation: Additions, Cadle School, Carmarthen Road, for the Education Committee; house, Moriah Road, Treboeth, for Dr. H. Lewis; house, Middle Road, for Mr. E. Rowcliffe; two houses, Cecil Street, for Mr. I. J. Aubrey; two houses, Walters Street, Manselton, for Mr. J. Jewell; two houses, Lon Gwynfryn, for Mr. R. Strawbridge; alterations, "White Rose" P.H., Newton Road, Mumbles, for Messrs. Bass & Co., Ltd.; six houses, The Mayals, for Mr. H. W. Saunders; house, Lilliput Road, for Mr. C. Richards; two houses, Glanmor Park, for Mr. H. Strawford; two houses, Penyrheol Drive, for Mr. B. Hinds; house, Gower Road, Killay, for Miss M. A. Williams; four houses, Lon Caebane, Sketty, for Messrs. Williams and Bennett; two houses, Station Road, Cockett, for Mr. W. Jones; house, Norton Road, for Mr. K. R. Jones; house, Llangyfelach Road, Clasemont, for Mr. Henry Lewis; two houses, Carmarthen Road, for Messrs. Thomas and Jones; two houses, Clydach Road, for Messrs. Pike and Hopkins; two houses, Penyrheol Drive, for Messrs. Thomas and Lewis; hall, Gelli-grafog Road, for the Forward Movement.

SCOTLAND

The GLASGOW Corporation has acquired a rehousing site at North Street, Whiteinch, where sixty-six houses are to be erected.

The GLASGOW Corporation Housing Committee has approved plans submitted by the houses director, of a proposed layout for rehousing purposes of the cleared areas at Water Street, Port-Dundas Road, and Charlotte Street.

The GLASGOW Corporation has prepared plans for rehousing tenants in Finnieston and Tunnel Streets who have been dispossessed in connection with the proposed construction of the Finnieston Bridge.

Plans passed by the GLASGOW Corporation: Store, London Road, for Messrs. King Bros.; roads and sewers, Netherauldhouse, for Messrs. Nether Pollok, Ltd.; temporary school, South Carntyne; new school and janitor's house, Gorget Avenue, Knightswood, and school and janitor's house, Lanrig Road, Balornock, for the Education Authority.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to November 30, 1929: 1919 Act, by local authorities, 25,129; 1919 Act, by public utility societies, 421; Private Subsidy Schemes (1919 Additional Powers Act), 2,324; Slum Clearance Schemes, 10,958; under construction, 1,744; 1923 Act, by local authorities, 4,028; under construction, 2; 1923 Act, by private enterprise, 17,342; under construction, 1,268; 1923 Act, by public utility societies, 80; 1924 Act, by local authorities, 41,082; under construction, 5,169; 1924 Act, by private enterprise, 1,430; under construction, 1,430; 1924 Act, by public utility societies, 127; demonstration houses, 17; steel houses erected on behalf of Government by Scottish National Housing Company, 2,552; total completed, 105,490; total under construction, 9,613; total, 115,103.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_1	CAMBRIDGE	E. Counties	1 6	1 1½
B_1	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_1	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_1	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
A	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.			£0	11	6
Thames ballast, per yd.			0	10	0
Pit gravel, per yd.			0	15	0
Pit sand, per yd.			0	12	6
Washed sand, per yd.			0	13	0
Screened ballast or gravel, add 10 per cent. per yd.					
Clinker, breeze, etc., prices according to locality.					
Portland cement, per ton			£2	8	0
Lias lime, per ton			2	0	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.					
Transport hire per day:					
Cart and horse £1 3 0	*Trailer*		£0	15	0
3-ton motor lorry 3 15 0	*Steam roller*		4	5	0
Steam lorry, 5-ton 4 0 0	*Water cart*		1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1. per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:			
Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	0
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ¾ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour*; MATE, *do.* 1*s.* 4*d. per hour*; ERECTOR, 1*s.* 9½*d. per hour*; FITTER, 1*s.* 9½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour*; MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, 3/16 in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz. per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; FRENCH POLISHER, 1*s.* 9*d. per hour*; PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

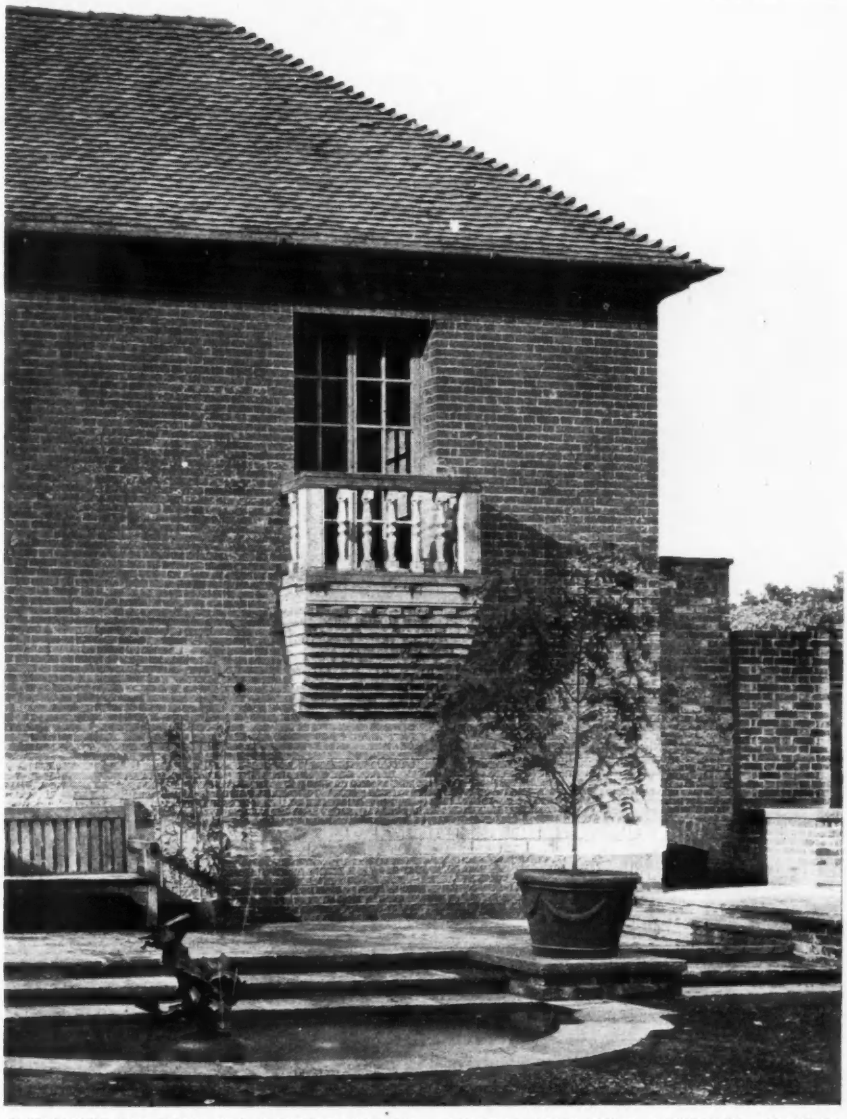
SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. *The measured work price is on the same basis . . . per ft. sup.*	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards. plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

MARGINALIA: No. 2



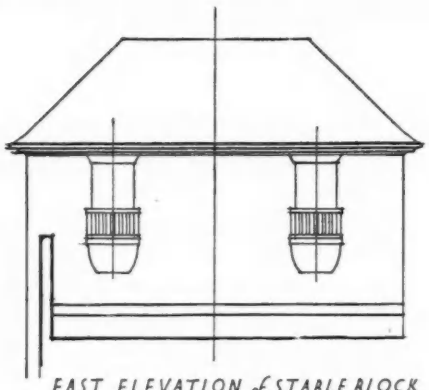
BALCONY TO END OF STABLE BLOCK: SHEPHERD'S HILL, BUXTED, SUSSEX

By EDWARD MAUFE

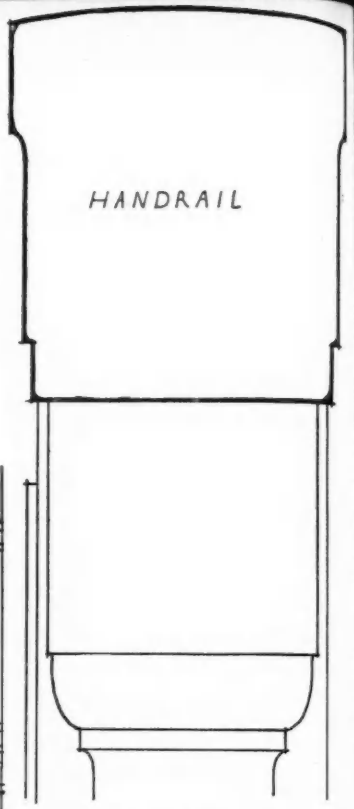
THE original double-hung sashes in the east end of the old stable block, overlooking the sunk garden, have been converted into French casements, with their stone thresholds extended to form balconies. Oak balustrades were designed to accord with the style and manner of the rest of the work, and the whole was supported on brick corbellings, tailed into the wall.

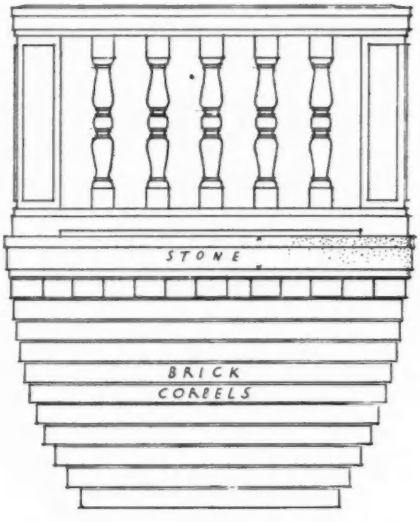
The detail drawing, reproduced to scale on the following page, shows that the corbellings were intended to be of elliptical outline and convex in mass, but only one set has been so built; the other, owing to some misunderstanding, has been given a concave outline. The resulting effect, giving equality of mass, with this slight difference of detail, is altogether satisfying.

The oak has been left in the white, with no subsequent treatment. On reference to the detail drawing it will be seen that openings have been left in the bottom rail or sill, and on the front and sides, to allow the surface water from the balcony to get away.



EAST ELEVATION of STABLE BLOCK SHOWING BALCONIES 1/16" SCALE

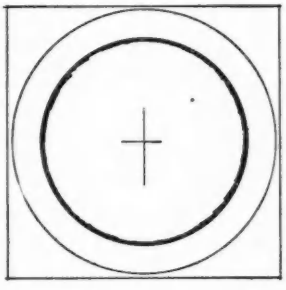




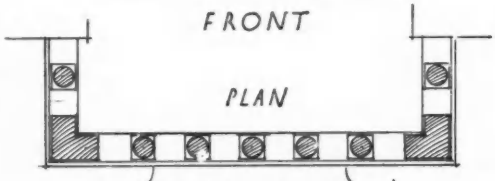
FRONT



SIDE



PLAN thro BALUSTER



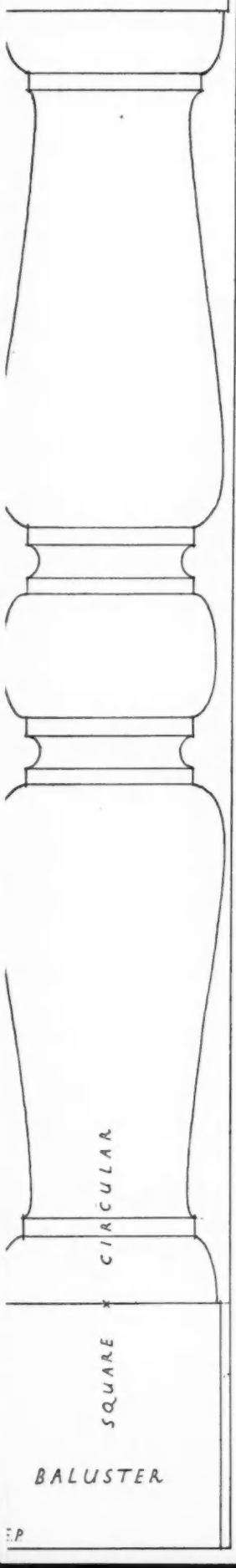
PLAN

SHEPHERDS HILL

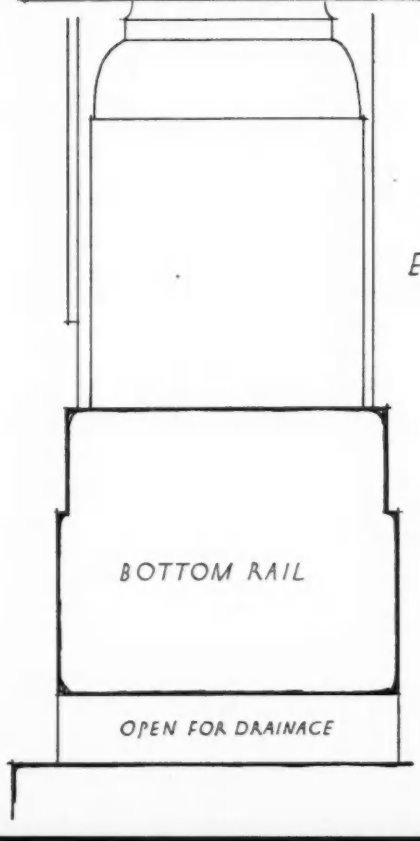
DETAIL OF OAK BALCONIES TO END OF STABLE BLOCK

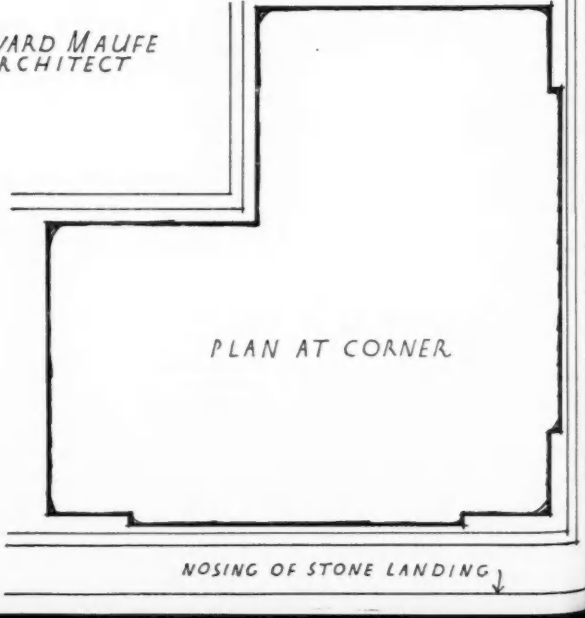
HALF INCH SCALE & HALF FULL SIZE

EDWARD MAUFE ARCHITECT

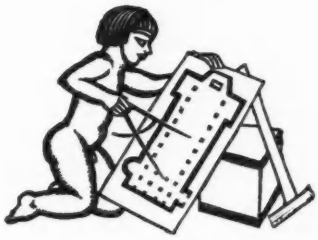


BALUSTER





THE ARCHITECTS' JOURNAL



WEDNESDAY, JANUARY 8, 1930

ARCHITECTURE MILITANT

A Year of Warfare

HOW pleasant it would be if the architectural profession could consist of artists who had no other concern than to practise their art. Unfortunately, however, it is incumbent upon architects to be not only artists but warriors. Unrestingly they must fight the battle of architecture; and a very severe and bitter form of warfare it often seems to be.

The past year has witnessed some formidable encounters, which, if they have not in every case resulted in a victory for the architectural profession, have at least given proof that it has a healthy combatant spirit. The general public is gradually being made aware that the architectural profession exists and that when some vital principle is at stake it is capable of showing that it has not only a bark but a bite.

Its first display of pugnacity occurred four years ago, when the London County Council had expressed a determination to demolish Waterloo Bridge. The Royal Institute of British Architects was the prime mover in establishing the Conference of Societies for the protection of Waterloo Bridge, with the result that Parliament appointed a Royal Commission to consider the whole question of cross-river traffic, and this Commission issued a report which caused the London County Council to revoke its decision concerning Waterloo Bridge. But although the architectural profession were victorious in the first round of this battle, they have not as yet been successful in the last.

The Charing Cross Bridge scheme, as agreed upon by the technical advisers of the London County Council and the Southern Railway, should be so amended as to be worthy of the unique architectural occasion which called it forth. Here again it will be necessary to work through the vehicle of Parliament. It is not sufficient to impress our legislators by press propaganda directed to exposing the blemishes in the official scheme; an effort must also be made to canvass individual members of Parliament, wherever this is possible, and inform them of the serious issues involved.

It is noteworthy that in a number of important instances those who are fighting the battle of architecture have found that they could best advance the cause which they have at heart by insisting upon the virtues of open competition. Not often can an institution simultaneously express the basic ideas of both aristocracy and democracy, but surely this merit may be claimed for a system which secures that great opportunities are given to the highest talent and which at the same time enables this talent to be chosen from the widest possible field. In the case of Charing Cross Bridge it would be an obvious solution of the present difficulties if a great competition might be held, in which architects were invited to submit their designs for the new bridge and for the layout of its environs.

Only a few weeks ago the principle of the open architectural competition was once more appealed to, and this was in connection with the activities of H.M. Office of Works. It did not appear desirable that a Government department should reserve to itself the privilege of designing public buildings of every description, while at the same time no steps were being taken or, in fact, could be taken, to appoint or retain a staff of architects comparable in efficiency and talent to that which could be chosen from the ranks of private practitioners. Fortunately, H.M. Office of Works has seen fit to yield upon one point, and it is now no longer certain that the projected new block of offices in Whitehall will be designed by civil servants. And even in the case of Calton Jail in Edinburgh, the design prepared in H.M. Office of Works will be subject to a full measure of public criticism before contracts for it are invited.

The Westminster Abbey Sacristy was yet another subject of controversy, and here again it was suggested that the best method for improving upon a certain architectural proposal was by the formulation of alternative schemes. And it is undoubtedly a notable victory that the critics of the original scheme secured its abandonment. Whatever now happens to the Abbey, its North front will not be disfigured by the addition of a structure inharmonious with it.

Other architectural battles await us in 1930, one of the foremost of which will probably be in the field of æsthetic control, and a further effort will need to be made in order to stop the tide of bad buildings which threaten to disfigure both town and country. We want no pacificism here, and indeed it behoves every one of us to make a New Year's resolution to represent in his own person the spirit of architectural militancy.



LLOYDS BANK, VICTORIA STREET, LIVERPOOL: DESIGNED BY GRAYSON AND BARNISH

A leading provincial building, recently completed, selected for illustration and critical description in the article, "Two New Buildings Reviewed," beginning on page 44 of this issue. "This building attracts attention by its solid artistic merit. The architects are aware that certain problems of design have already been solved, and they are not ashamed to make use of time-honoured motifs, provided that these are justified in logic."



Professor C.H.Reilly, who has celebrated his 25th year at the Liverpool School of Architecture.

NEWS & TOPICS

The Past Year Under Review



The late Ralph Knott, architect of the London County Hall, now to be completed.

CONTROVERSIES OF THE YEAR

SENDING my mind down that brief corridor of time labelled 1929, I seem to have found it more a year of promise than of action; and more of promises than of promise. Of the discussions by which the year has been marked, that anent Charing Cross Bridge is by far the most important and in some lights the most disappointing. Whether the scheme which finally appeared, and is, maybe, to be jockeyed through Parliament, is the very worst that could be found remains a matter of opinion; but that it could be immeasurably finer, and less wasteful of golden opportunity, there can be no doubt. Yes, Charing Cross is a disappointment.

OFFICIAL ARCHITECTURE OR OPEN COMPETITION ?

Barren, too, is that other more acrimonious controversy that sprang fully armed from Lord Londonderry's bold words to the Architecture Club : Official Architecture or Open Competition ? The Office of Works is silent and, for the moment, all the letters that have been given prominence in *The Times*, all that have been sent to the Minister of Health, even the weightiest of deputations itself, have glanced aside from the adamantine front which the Crown officials have been able to present to the architects, its critics. One feels the draught of a heavy door slamming, and hears the clang of the lifted drawbridge.

WESTMINSTER ABBEY SACRISTY

Things have been brighter over the other side of Parliament Square. I shall remember the campaign over the Abbey Sacristy as being a very model of what such things should be : full of action and surprise, march and countermarch, and ever the uncertainty of the issue.

PROFESSOR REILLY'S ACHIEVEMENT

Forgetting Battersea Power Station, where the odds were heavy, and might triumphed, let me turn to celebrate happier events, chief among which must be ranked the more than ordinary achievement of Professor Reilly's twenty-fifth year as director and *pater patria* of the Liverpool School of Architecture. Far beyond the boundaries of the school, which owes everything to his vision and passionate energy, his influence has been felt in the whole body of contemporary architecture, as a new orientation towards scale and fine detail, and a return to the careful study of exact proportion. It would indeed be difficult to overestimate the value of Professor Reilly's contribution to present-day architecture, and there is perhaps nothing that can be looked back upon with more certain pride than the knowledge that this year, which commemorates his long association with architectural education, sees also something of its fruits.

LIVERPOOL'S MIGHTY ECCLESIASTICAL BUILDINGS

Sir Edwin Lutyens's appointment as architect to the new Roman Catholic Cathedral for Liverpool must be had in remembrance, not only because Liverpool finds itself thus in the unique position of being the only city in the country to be engaged in the building of two mighty ecclesiastical buildings, but because we shall be enriched by the greatest work of an architect who has shown himself to be an artist, and perhaps the last master of the grand Romantic-Classic school.

MARKS OF MODERNITY

Far removed stands another of the year's definite achievements. The Underground building at St. James's Park may be hailed as the first large-scale success for architecture without history. And not far away stands the Horticultural Hall, which, in the new turn it gave to the conception of a modern building of the exhibition class, broke fresh ground and won for its architects the gold medal of the R.I.B.A. for the best building of the year. Here one does well to recall, too, that modern decoration and furniture were given full public honours when, early in the year, Messrs. Waring and Gillow organized the best exhibition of well-designed *ensembles* which it has been our good fortune to see. And must I also recoil from the growing plethora of hideous initiations of modernity with which some willing but misguided shopfitters have defiled our public thoroughfares ? And must I shudder again at the thought of all the hundreds of new cinemas which imitate everything under the sun and sky ? Needs must, I fear, if the year is to be chronicled in its bad days along with its good.

COUNTRYSIDE PRESERVATION

There is to be told on the gentle side the story of the work of preserving the beauty of the countryside. A sad story, when one remembers why we seek to preserve, and cannot, as in time past, leave well alone; but heartening, when one recalls the many places of real beauty and the tracts of fine country which a reawakening public taste has arisen to secure for all time. There is to be detected also, as a growing force directed towards the same end, a new spirit, among those who direct local government, to make greater use of the instruments which have been put

into their hands for dealing with the worse aspects of spoliation, advertisements, bungaloid growths, and litter, great and small. I may remark, indeed, a certain new note of seriousness with which the public Press, both in London and the provinces, discusses matters of architecture, town-planning and all things pertaining to amenity. These things seem to have become a quite real part of the " news," and never before have we been able to command so good a Press as now.

INFLUENCES FROM ABROAD

In other countries but our own many things have happened which a wider survey of the year might take



The late Sir Robert Lorimer, who made his reputation in Scottish baronial architecture, and won fame and a knighthood with his chapel for the Knights of the Thistle, St. Giles's Cathedral.

into account. Who knows what, of all the events of the international year, will have its repercussion upon our own national architecture? In Paris, Berlin, Stockholm and Chicago, new forms are being evolved, and men are working out new theories of salvation, the effects of which may reach us long after the first shocks of their discovery. Let it be sufficient indication of our awareness of these things that we should be honoured by the Swedish Government, through the instrument of Mr. Yerbury's recent decoration, a matter of congratulation only too well deserved.

VALE

The hand of death, alas! is never shortened. I think of Ralph Knott, cut off in the very prime, before his mortal eyes could see the fulfilment of his great conception of the London County Hall; of Sir Robert Lorimer, full of works and of honour; and of many more, ill to spare from the ranks of the profession, whose services thereto have been recorded in these pages during the twelvemonth.

THE STORY OF A FIRST COMMISSION

It remains to set on record that 1929 produced, during many breathless weeks, the story of one Spinlove and his first big job. Never before has it been given us to see ourselves as some who are blessed with humour and a gentle irony have seen us, and never before was there written such an exposition of the joys and sorrows, difficulties and triumphs of the ten-sided job of being an architect. There is little wonder that *The Honeywood File* should have become a best-seller to a wider public than the R.I.B.A. can hold, for it will be accounted one of the most interesting documents on contemporary life which we can bequeath to future generations. Almost it makes me think that 1929 was not the disappointing year I feel it to be, but a Karshish jubilee.

ENVOI

Would that it were possible to flatter ourselves with the recollection of more definite achievements. Too many issues linger in suspense: the R.I.B.A. and registration; the conference; elevation control; housing; competitions; Mr. Lansbury; the financial slumps. There is too much, here, to think of with equanimity. Let 1929 go down the wind with no more reproaches.

★

Even as I had laid down my pen, the closing hours of this sinister old year bring in, over the wireless, the appalling news of the disaster at a cinema in Paisley. No man may learn of such happenings without being shaken, least of all an architect. For they remind him of the grave nature of his responsibilities to the public. This was, it seems, a pure mischance where no blame can be laid, at least, on a violation of planning regulations. But it does emphasize the supreme importance of such ordinances that have, at times, irked most of us; and we may well congratulate ourselves on their preventive efficacy.

★

It strikes me as a good deal more than mere coincidence that Karshish should have chosen, weeks before, as the theme of his new serial, which is to begin in this issue, the serious and detailed, if fictional, history of the collapse of a hall that might well, as he remarks, have incurred a tragedy that would have been similar in kind.

FEMININE MODESTY

" I think bachelor architects should be shot on sight ! " So writes a certain lady—" the well-known architect, in an interview "—in a provincial paper. There is a very great deal more that she may intend to be more provocative than it really is. " I am an idealist about homes . . . I culled the best . . . and applied some of each to my own houses." " In a house which I built in Sydney, in Australia, at the request of the Government, I used a pet idea of mine—to utilize the roof-space. And why not ? " (Why not, indeed ?) " Why *do* most men architects overlook the need for plenty of windows ? " (But do they ?) " A man invariably places the hot water supply just where it isn't convenient ! And excuses himself by



What the new German flat balconies must really have been designed for: a cartoon entitled "Prosit Neujahr 1930!" from the monthly magazine Uhu.

saying the extra walking to and fro is good for the cook's figure!" (This, of course, is sheer nonsense.) "One other feature which is another step forward. In my ideal home I have designed the furniture to match the house—ensuring complete harmony." (Now, a man would never have thought of that.) "Truly, in all modesty, there is room for more women architects and builders," she winds up.

*

A correspondent who sends me the cutting, from which I, too, in my humble way, have attempted to cull the best, points out that no reference appears to be made to this lady's name in the current issue of the *R.I.B.A. Kalendar*, and adds that perhaps this is fortunate, as she is apparently capable of causing a hold-up in Conduit Street, seeing the murderous impulses to which she owns. He thinks that a more appropriate place for the execution would be "on site." It behoves all bachelor architects to set about insuring their lives with all convenient dispatch.

HIGHWAY DEVELOPMENTS AT HIGHGATE

Will some of the charming eighteenth-century houses to be found in Heath Street and High Street, Hampstead, soon be demolished in order to provide wider roads to accommodate the increasing heavy traffic coming into London from the north of England via Hampstead Heath? This is one of the questions which is agitating lovers of old Hampstead, for there are rumours of road developments to the north of Ken Wood which will seriously jeopardize existing amenities. It is also known that the Ecclesiastical Commissioners and the Hampstead Co-partnership Tenants wish to develop for building purposes much of the open country close to Turners Wood, and that they are resisting the town-planning proposals put forward by the Finchley Urban District Council. Fortunately public opinion is now awake to the danger. At a public enquiry which will be held in the course of the next few weeks it is hoped that the forces of those who intend to resist the spoliation of North London's open space, and the probable destruction of many buildings of architectural merit, will be mobilized in time to secure the approval of Finchley's admirable town-planning scheme in its present form.

WELL DONE, BOMBAY!

In Bombay, I read, the Corporation have referred the following resolution to the Municipal Commissioner for consideration: "That the Corporation recognize that the beauty and dignity of the city depend to a great extent on the sound architectural design of its buildings and that, to ensure the municipal buildings being worthily designed, the Corporation are of opinion that the head of the Architectural Department and his assistants should be men who have received an adequate architectural training and who have obtained a recognized degree in that art. The Head of the Department must therefore be one who has passed the Associate Examination of the R.I.B.A., now to be held in Bombay, and all the assistants of the department should hold at least the Bombay Government Diploma in Architecture."

DEAR, OH DEAR!

"Now, Johnny," said the teacher, "what do we see in the country besides grass, trees, and flowers?"

"Advertisements," said Johnny. ASTRAGAL



Behold this scene. Consider well
The horrid corp' where it has fell.
Ladies and Gents, that's how I dishes
Folks as refuse my Christmas wishes.
So when I says, as says I do,
An 'earty Christmas unto you,
Jump to it, or by Joves and Jingo,
I'll larn you in another lingo.

An original Christmas card sent by one of Astragal's friends.

TWO NEW BUILDINGS REVIEWED

i: Lloyds Bank, Victoria Street, Liverpool

DESIGNED BY GRAYSON AND BARNISH



ON this and the following six pages are illustrated and critically reviewed two of the most recent buildings erected during the past year. Both reach a high architectural standard, though vastly different in styles. In the case of Lloyds Bank, Liverpool, Messrs. Grayson and Barnish have taken time-honoured motifs and used them logically and to the best advantage. In the case of the National Research Building at Hampstead Mr. Maxwell Ayrton has expressed the twentieth-century spirit in architecture with simplicity and orderliness. Each building is of brick, although Mr. Maxwell first intended to erect his building in concrete.

The Victoria Street, main, front. Silver-grey facing bricks of particular hardness and density were selected to withstand the soot and dirt of the city atmosphere.

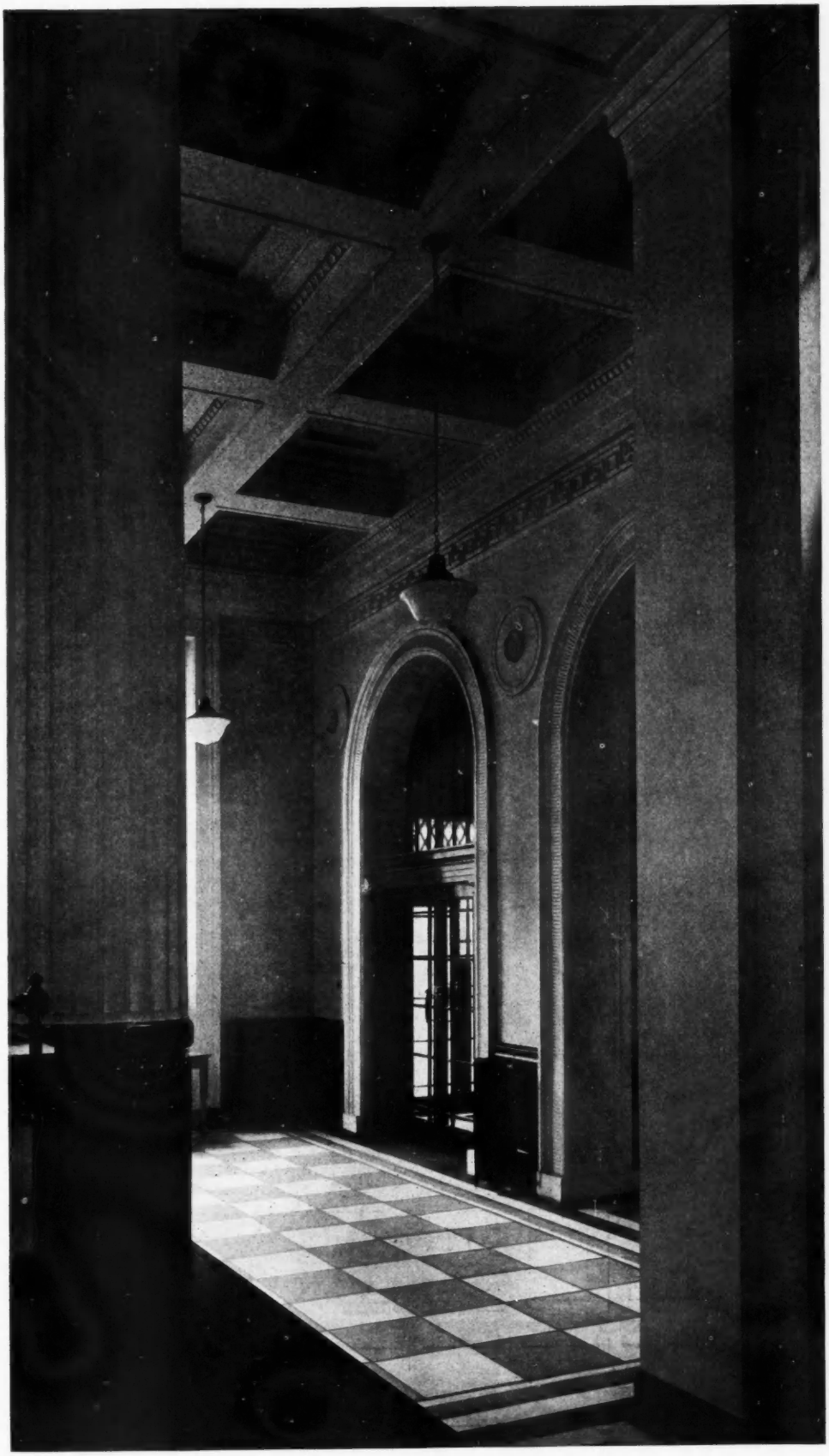
THE great banking houses have shown a phenomenal architectural activity during the last ten years, and have indeed played an important part in establishing the post-war convention for commercial architecture. Their influence has been a conservative one, for banks should be so designed as to suggest credit and security, and it is therefore unlikely that "experimental" styles will find favour with the directors of such institutions. The latest example, here illustrated, is that of Lloyds Bank in Liverpool. This building, designed by Messrs. Grayson and Barnish, attracts attention by its solid artistic merit. The architects are aware that certain problems of design have already been solved, and they are not ashamed to make use of time-honoured motifs, provided that these are justified in logic. For instance, it is observable that the façade is properly punctuated at its lower and upper terminals. The ground-floor story is differentiated from those above by the rustication of its brickwork, while its formal identity is further emphasized by the stone plinth and the small stone cornice, which also provides a fascia for the inscription. Near the summit of the elevation is the cornice, a feature which at the present day appears to need a defence, so often is it attacked by our modern puritans on the ground that it is not "functional"; whatever this may mean. But, obviously, the cornice serves the æsthetic purpose of giving to a façade an element of organic unity, for it makes it appear conscious that it is not stretching upwards indefinitely, but has a precise termination which deserves to be treated with ceremony. Moreover, a great advantage of the cornice is that it need not be placed at the summit of the building, but may on occasion be situated lower down, leaving an attic story above it; the terminal feature of the façade is then not the cornice alone, but the cornice plus attic. By such an arrangement it is possible to correct or modify the proportions of the elevation, should this prove desirable. For instance, if in the bank here illustrated the cornice had been at the very top, the façade would have appeared uncomfortably square. The cornice itself is of small projection, in order to comply with the local authority's bylaws, but what it loses in width it gains in depth, for it is associated with a frieze, also in stone, which is separated from the brickwork beneath by a torus moulding.



Another view of the main front, showing one of the two Portland stone entrances.

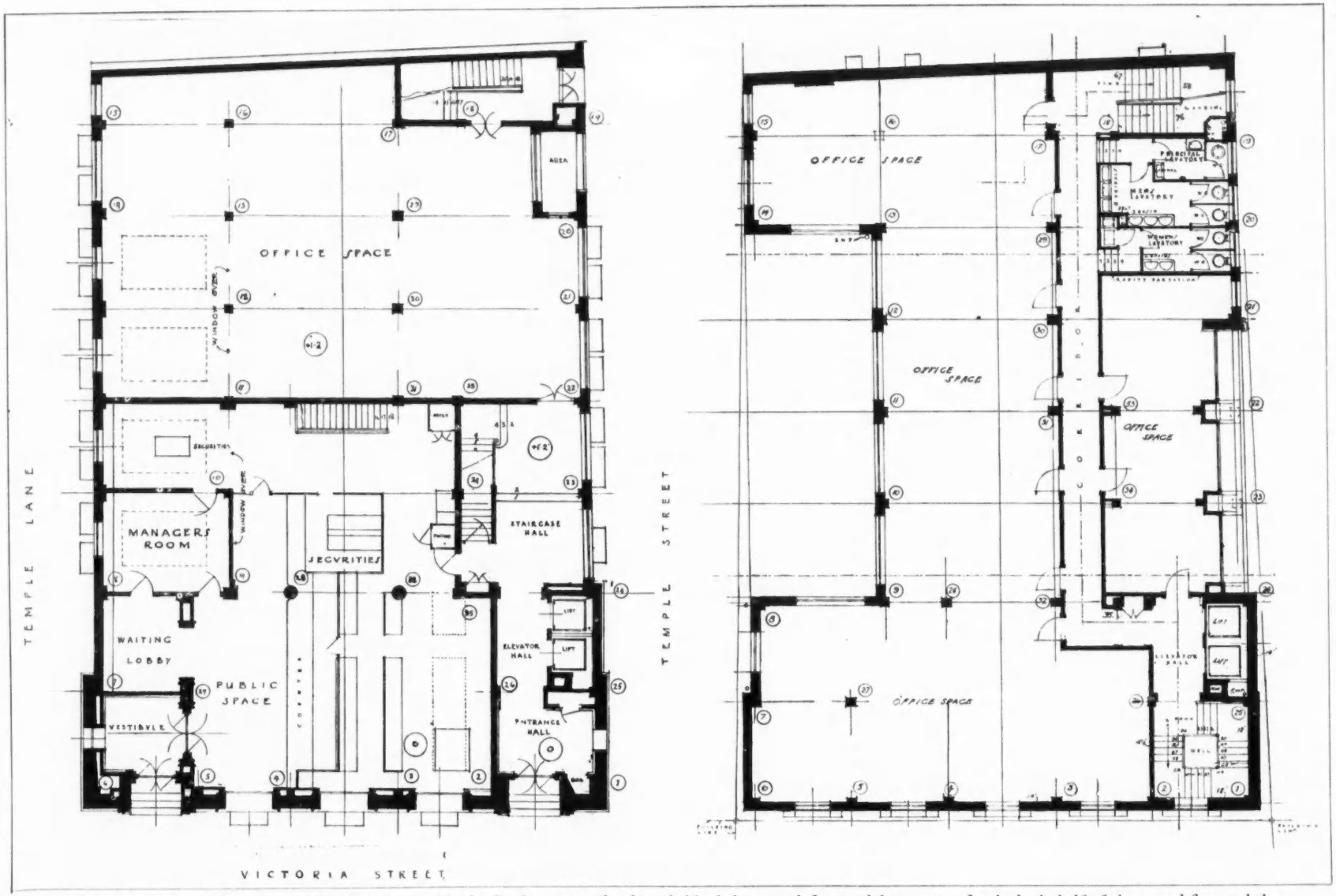
The stone facings appear again in the panelled parapet of the attic, and the architraves of the first-floor windows surmounted by bracketed hoods, and in the plinth and entrance doorways. These latter features are deserving of special notice, inasmuch as they are given an artificial equality for the sake of symmetry, although one of them serves the bank, while the other provides access to the offices above.

This duality of purpose, which characterizes most bank buildings, presents difficulties to the designer. It so happens that only on rare occasions



The public space, looking from the counter towards the vestibule. Clerestory windows materially assist in lighting the ground floor, including the banking hall.

Lloyds Bank, Liverpool.] [*By Grayson and Barnish.*



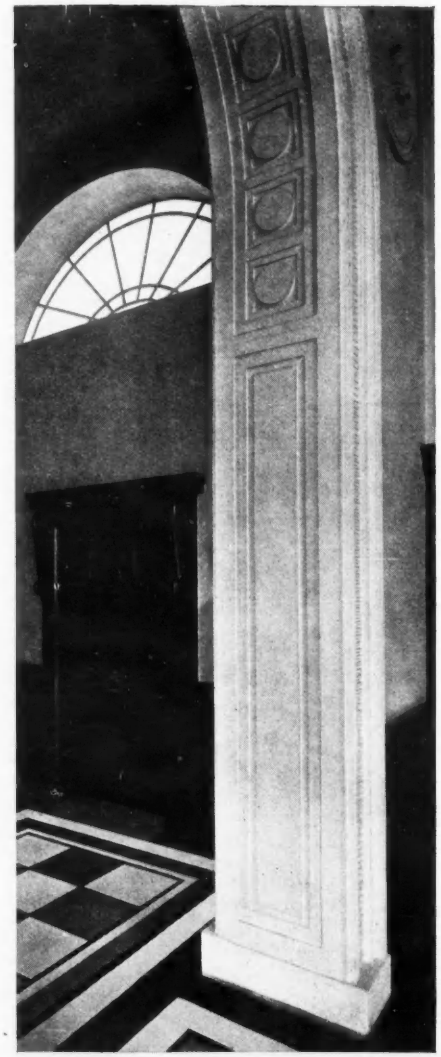
Plans of ground, and of a typical upper, floor. Lloyds Bank occupy the front half of the ground floor and basement. In the back half of the ground floor and the basement are a fruit saleroom and a fruit warehouse, respectively. The upper floors are let off, all the space being taken before the building was completed. Rectangular at the base, it had to assume a dumb-bell plan for the upper floors, to comply with ancient lights on both flanks.

at the base, it had to assume a dumb-bell plan for the upper floors, to comply with ancient lights on both flanks.

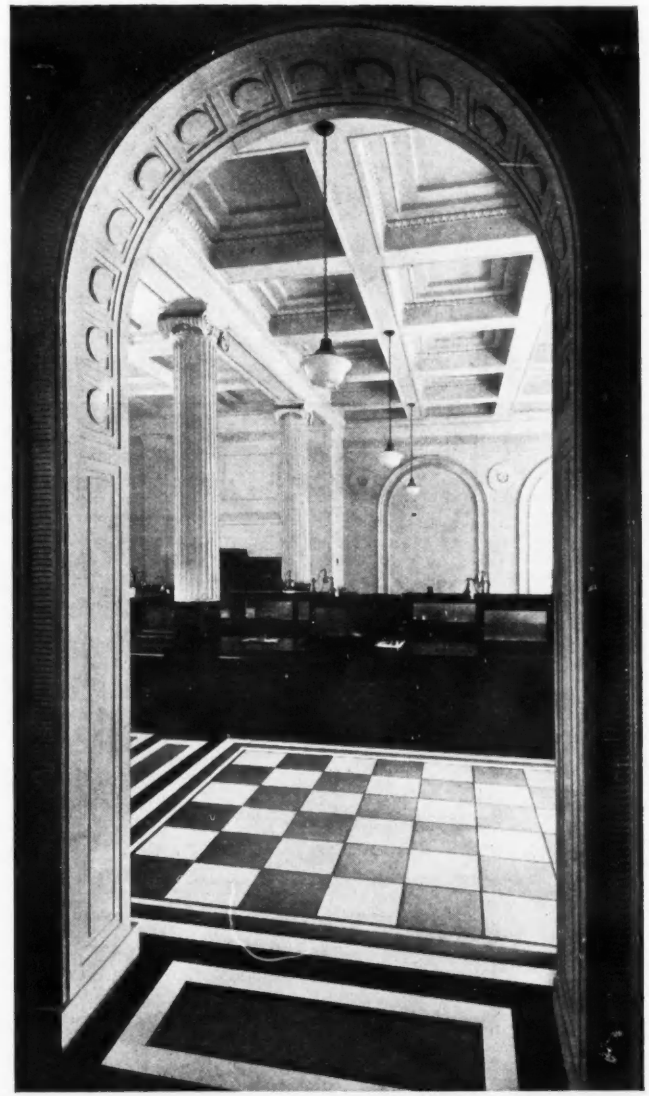


Lloyds Bank, Liverpool.]

Looking through the closed glazed doors of the vestibule into the public space. For photograph of other side of doorway see page 45.

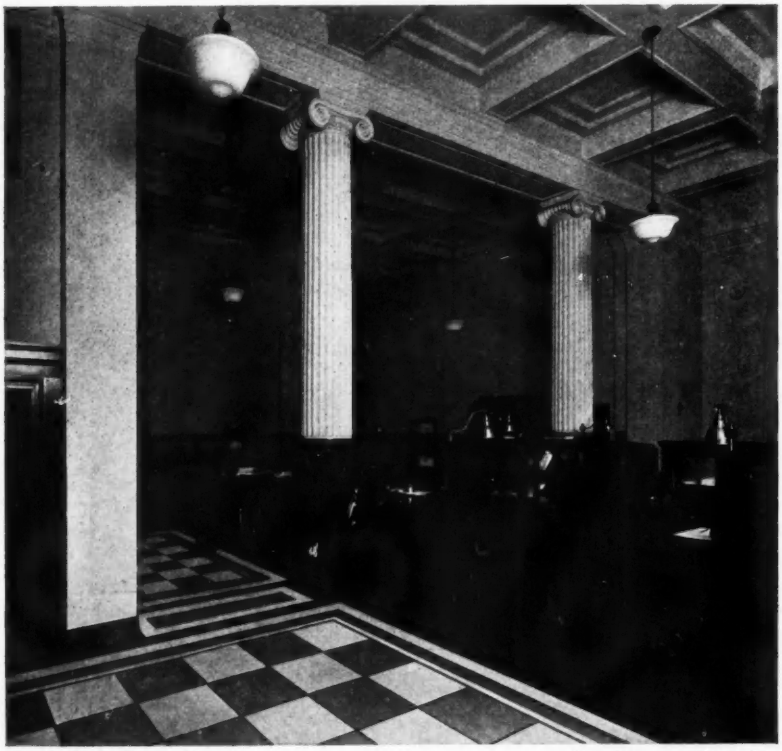


The doorway leading from the waiting lobby into the manager's room. Two entrances are provided to the manager's room for public use. That from the public space is shown on page 48.



[By Grayson and Barnish.

Looking from the waiting lobby through the arch into the public space. To the left of the arch is the manager's room.



Lloyds Bank, Liverpool.] [*By Grayson and Barnish.*

In the public space. On the extreme left is the door to the manager's room.

is it possible for a bank itself to occupy the whole of a building, for urban ground rents are very high and necessitate the erection of the tallest structure which the regulations allow if the site is to be commercially exploited. Thus we generally find the premises of the bank occupy only one or two floors, while the stories above are sublet as offices. The architect has the choice of two treatments: either he may give to the whole building a note of opulence which by right belongs to the bank alone, or else he may introduce a dichotomy into the façade and openly proclaim that the lower portion differs in function from the upper. In the former case the façade has a homogeneity which belies its real subject, while in the latter artistic unity is sacrificed to truthfulness of expression. Messrs. Grayson and Barnish have effected a happy compromise, for the grand cornice helps to secure the unity of the composition as a whole, while the rustication of the brickwork on the ground floor and the subsidiary cornice sufficiently differentiate the bank premises from the remainder of the building. The bricks are of a highly attractive shade of silver grey, with the result that the stone facings do not stand out too obtrusively. The detail, both outside and inside the building, is scholarly.

The plan is self-explanatory. The banking hall is well arranged, and has an air of dignity and spaciousness; and the communication between the public space, the waiting lobby and the manager's office could not be improved upon. The office quarters above are well-lit and ventilated, and lend themselves to convenient subdivision. This is a thoroughly well-equipped modern office building.

ii: Medical Research Building Extension, Hampstead, N.W.

DESIGNED BY
MAXWELL AYRTON

MR. MAXWELL AYRTON has departed from the rather florid style of architecture characterizing the original building to which he was required to add a new wing. The design here illustrated expresses a pleasing orderliness and simplicity, expressive of the twentieth-century spirit in architecture. Yet, by a strange misfortune, this building was singled out for attack by a well-known statesman living in the vicinity, who complained of its design, and further alleged that it obstructed his view. Yet the façade visible from the statesman's house could scarcely be plainer than it is, and is, moreover, almost entirely concealed by trees immediately in front of it. And that facing towards the declivity of the hill, although it has the interest which is derived from a variety in its parts, is yet entirely free from adventitious ornament and has the merit of good composition.

The building was first intended by the architect to be wholly in concrete, and even the walls were to be faced with this material; but eventually it was decided that such a treatment, while logical in itself, would not only have indicated too violent a departure from the style of the original block, but would also have introduced a discord between the new wing and the majority of the neighbouring houses which were faced with brick. The façade as at present designed is a singularly successful one, for the bricks chosen are very pleasant both in colour and texture, and great care has been taken to effect an adequate transition between the new



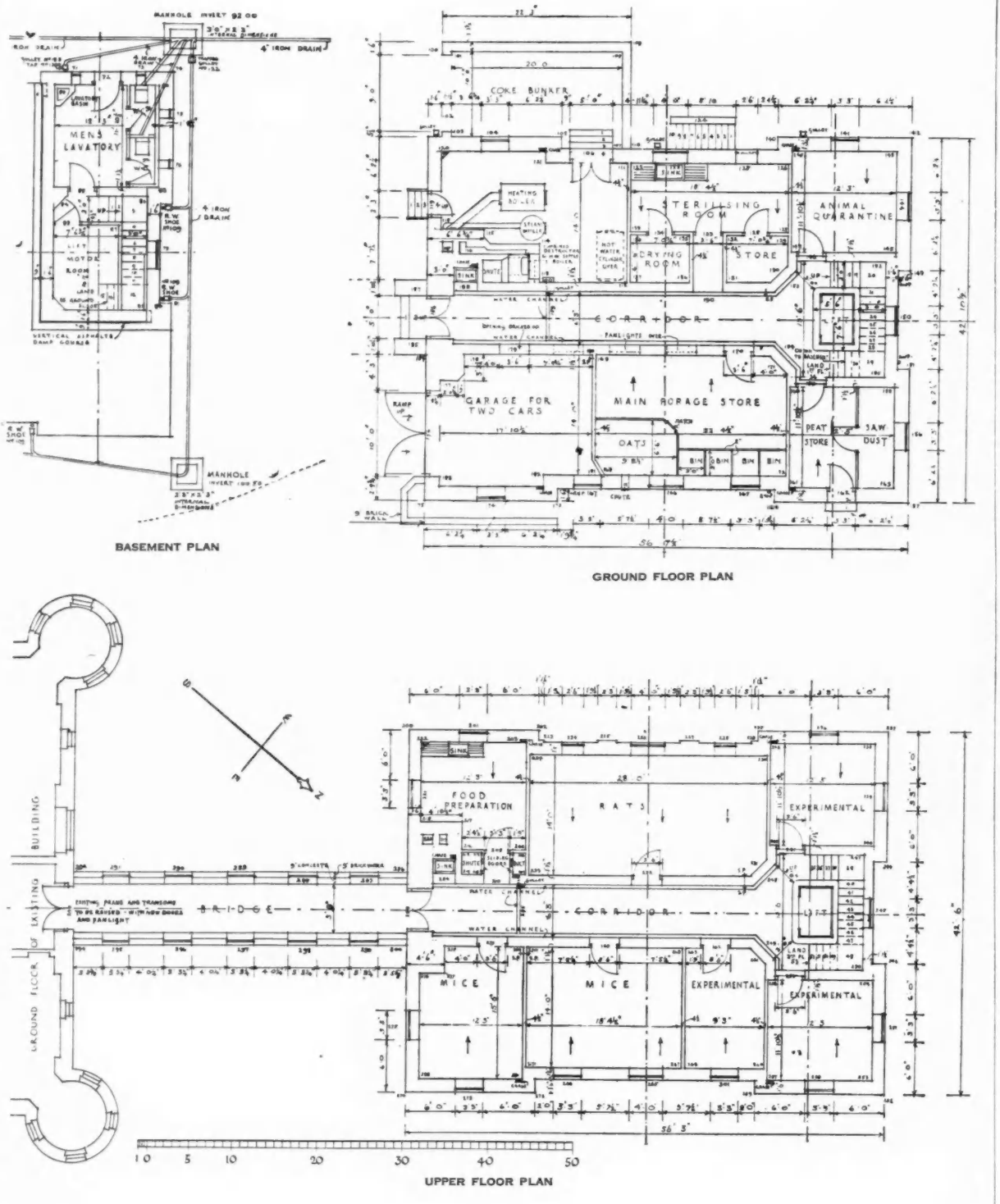
Medical Research Building.] [*By Maxwell Ayrton.*

The new building is connected with the old by a brick arched bridge.



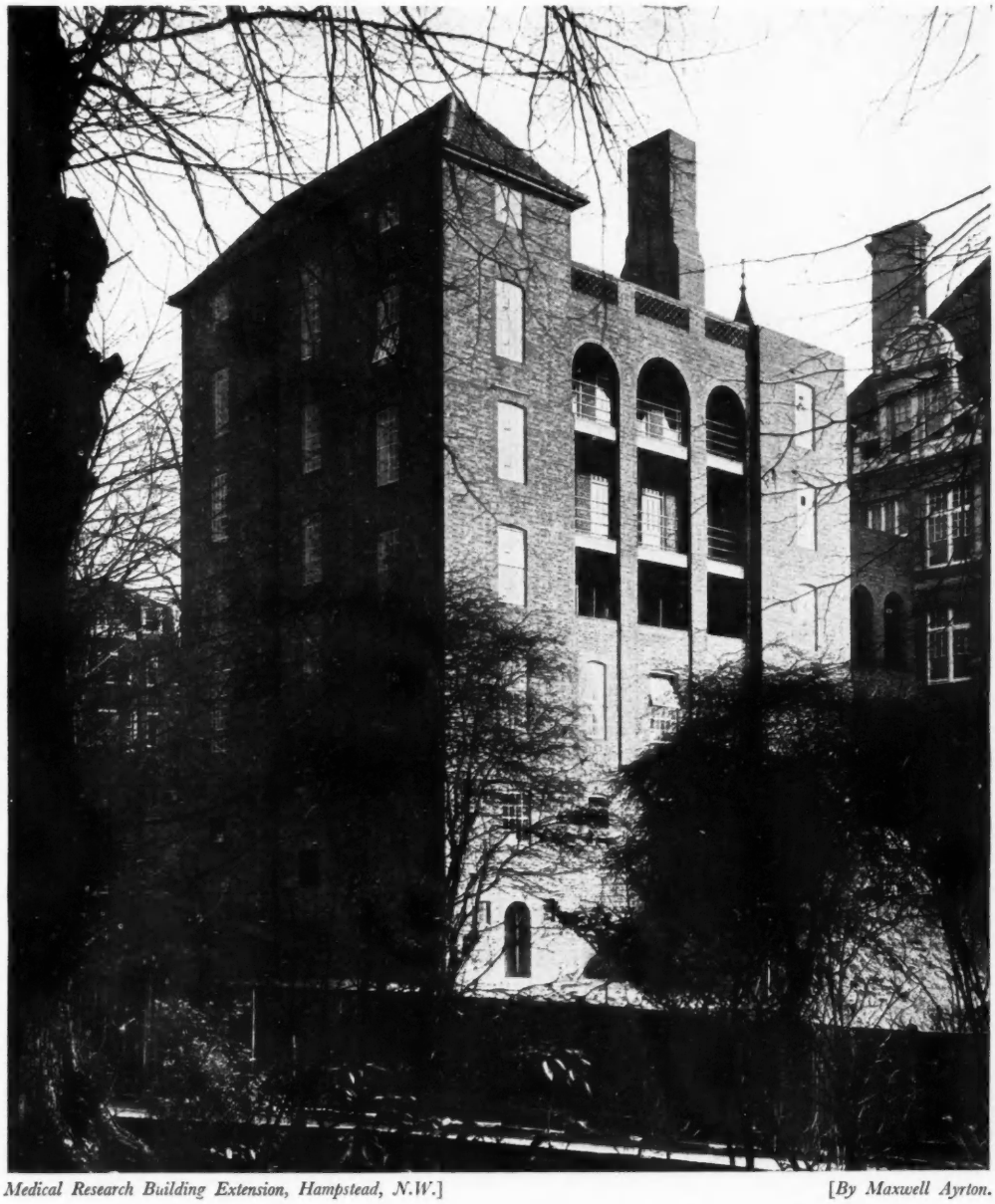
Medical Research Building Extension, Hampstead, N.W.] [*By Maxwell Ayrton.*

The south-west front. The bricks used are very pleasant, both in colour and texture, and great care has been taken to effect an adequate transition between the new and the old buildings and the neighbouring houses. To the right of the view is the bridge connecting the new and old buildings.



Medical Research Building Extension, Hampstead, N.W.] [*By Maxwell Ayrton.*

The building is notable, apart from its skilful planning, for its internal equipment, which is in accordance with the most scientific standards, and for the elaborate precautions taken to secure the cleanliness and ventilation of the rooms.



Medical Research Building Extension, Hampstead, N.W.] [*By Maxwell Ayrton.*

A view from the north-west, showing on the right a portion of the old building. The open balcony on the upper story is needed to ventilate certain special rooms of the Institute.

block and the old. This is effected by an arched bridge, so designed that we are not conscious of the difference of floor levels in the two buildings. The new block shows an interesting pattern of fenestration, which, however, reflects the interior planning, because the open balcony on the upper story is needed to ventilate certain special rooms of the Institute. The internal equipment is in accordance with the most advanced scientific standards; and elaborate precautions are taken to secure the cleanliness of the rooms.

The slope of the ground provides an opportunity for planning a small basement which gives accommodation for a staff lavatory and the lift motor-room.

It may be of interest to compare this building with others which house the activities of the medical profession. A question of civic values here arises, and the designer must consider what is the right degree of emphasis appropriate to a building intended to serve the purpose either of a hospital or of a laboratory for medical research. Two pitfalls here confront the architect. In yielding to the imperious dictates of economy, he may allow practical considerations to determine the whole design, and there results an ugly structure with wings jutting out here and there and a much too obtrusive display of the numerous soil-pipes and other symbols of modern sanitation. A blemish of the opposite kind occurs when the building takes upon itself an architectural splendour quite unfitted to its position in the hierarchy of civic buildings. Mr. Maxwell Ayrton is to be congratulated upon striking the happy mean, and the National Institute of Medical Research is neither crudely utilitarian nor yet ostentatious.

JAGO *v.* SWILLERTON AND TOOMER

In the matter of the Arbitration Act, 1889

BY KARSHISH

The essential constructional facts of this fiction are from experience and are exactly true in all details. The procedure of a reference to Arbitration is presented with accuracy, and the setting, if somewhat highly coloured, is a true picture.

i: The Plaintiff Opens

THIS was an action by Colonel Vivian Fanshawe Jago, of Grastopen Manor, Midshire, Justice of the Peace, for damages for negligence on the part of the defendants for the collapse of a Village Hall. Defendants were respectively the builder and the architect. The plaintiff's statement of claim showed a total of £3,127, of which £2,873 was the estimated cost of reconstruction. The defendants jointly denied liability for the failure of the structure, and each, alternatively, contended that failure was due to the negligence of the other.

Mr. Hopetoun Gizzard, F.R.I.B.A., F.S.I., Barrister-at-Law, had been appointed arbitrator by the President of the Royal Institute, under a provision of the arbitration clause in the contract, as the parties had not been able to agree a nomination. Not only had they failed to agree an arbitrator, but they had failed to agree that any one of them should propose a name. This was not remarkable if we consider, first, that there were three parties to the suit, so that—as in choosing a wall-paper—the chances of agreement were ten times as remote as when two parties only are concerned; second, that each party felt that the others sought some secret advantage in the nominations they would make; third, that Jago wanted a lawyer, Swillerton a surveyor, and Toomer an architect; and, finally, that none of the three were in a temper to agree about anything whatever.

This question whether lawyer, surveyor or architect should preside over their destinies proved so difficult for them that it had been referred to a Master in Chambers—a Master being an officer of the High Court empowered to decide preliminaries of actions; and the Master in Chambers had decided that the arbitrator should be someone who was a member of the Bar, and an architect and surveyor as well—a solution that any three disputing schoolboys would probably have arrived at in five minutes. The President for the time being of the R.I.B.A. had duly nominated Mr. Hopetoun Gizzard as satisfying these conditions, and his task must have been easy, for his choice was, obviously, small.

In the matter of procedure the parties had, however, come to terms. Jago had, necessarily, to bring two actions—one against the builder and the other against the architect—for he considered each to be liable to him for his losses, although their responsibilities to him were different. Either party could, however, have the action made a joint action by going before a Master in Chambers, but they had saved themselves, and the Master, that trouble by agreeing the matter.

Jago had also, to this same end, agreed with Toomer to submit their action to arbitration; for though Jago and Swillerton were, under the terms of the contract, bound to refer their dispute to arbitration, Toomer, as architect, was not a party to the contract, and was not so bound: his contract with Jago was the implied contract between principal and agent which is set up between building-owner and architect when the latter is offered, and accepts, a commission; and *either* party was entitled to make the case an action in the High Court. To do this would have suited the lawyers' pockets excellently, but it would not have suited the pockets of Jago and/or Toomer, and terror had guided them to agree in submission to an arbitrator. Thus, Mr. Hopetoun Gizzard, of multiple qualifications, had to decide (1) whether the plaintiff Jago was entitled to damages, (2) the amount of those damages, and (3) whether the defendant Swillerton or the defendant Toomer were liable and, if both of them, then in what proportion. From this it will be realized that the arbitrator's task was a pleasanter one than that of the unlucky defendants, who, by the infernal logic of lawyers, had to plead at one and the same time that neither of them was in any way liable and that each of them was, separately, completely so.

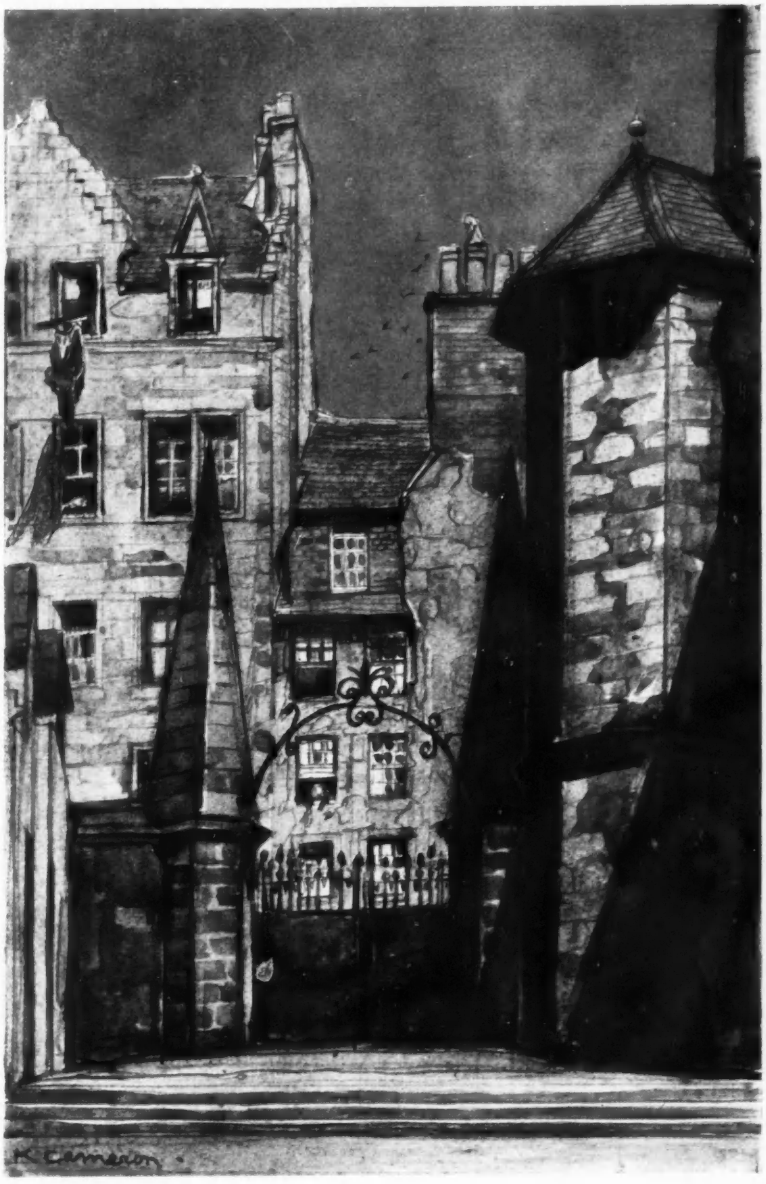
The plaintiff, Jago, was represented by Mr. Geoffrey Chawlegger, K.C.—whose name I seem to recognize—and by Mr. Richard Gadd; the defendant, Swillerton, by Mr. Twistle; and the defendant, Toomer, by Mr. Charles Polechat, K.C., and Mr. Charles Wrackem—hereinafter called the Charles's.

Mr. Bosson, of Noble and Bosson, Toomer's solicitors, said that it was "just as well" to brief a K.C., as "the other side" had done so; and Toomer had sighed as he sat nervously biting his thick fingers, for he knew this meant a bigger fee and two-thirds as much again in fees for K.C.'s mate, or "Junior Counsel," as they called him; and though Toomer had a well-established practice in a provincial manufacturing town, the poor devil had no money to throw about. The unhappy man was so unnerved by the mishap that had flung him bodily to the lawyers, that he had no power to take stock of his chances: it was as though a tiger had sprung at him from among his own gooseberry bushes, for a newly finished building of his had fallen down. It had actually collapsed flat on the ground.

Such a thing would knock the confidence out of any "architect and surveyor" of forty-seven who had been in independent practice nineteen years; but the thing had not only happened in the middle of the district where Toomer's activities almost exclusively lay, but almost next door to his country home, and under circumstances which offered no security that any other building of his, past or future, might not, for some inscrutable reason, sit down on its heels in the same way. It was a lucky chance that he had not killed a round score of his neighbours and maimed twice that number; but his gratitude to Providence for sparing him this crowning horror was tempered by resentment at the unnecessary officiousness of Providence in knocking the place down.

Toomer was accordingly greatly depressed in spirits; and as he was a surveyor only by training, and an architect only by assumption; and as he was, besides, a phlegmatic man, slow, exact and methodical, with the mental equipment of an extremely intelligent bullock, he was overawed by the professional ascendancy and brilliance of London, so that Bosson speedily took charge of him and lugged him about impatiently as though he were a heavy child. The firm of Noble and Bosson was a firm of one solicitor and a bit over, and Bosson was the bit over. Noble was a huge, overpowering man and Bosson a ridiculously smaller and subservient, and he was glad to recapture some of his self-esteem by hectoring it over Toomer, whose dejection thus became reduced to numb, bovine misery.

At an early interview Bosson had said: "Well, now about your proof." "But they don't say anything was wrong with the roof, do they?" Toomer



THE GATEWAY OF MORAY HOUSE:
A RELIC OF MEDIEVAL EDINBURGH

From Haunting Edinburgh, *by Flora Grierson, illustrated in colour by Katharine Cameron, A.R.E., R.S.W. Published by John Lane The Bodley Head Ltd., London.*

(See the Book Review pages in this issue.)

exclaimed in consternation. "Proof; proof, man!" said Bosson; and he took a quire of thick blue paper and wrote down rapidly all Toomer's christian names in full, his age and place of birth and particulars of his education, qualifications, and professional circumstances; and then went on to gather all that was creditable and praiseworthy in the antecedents of his client, so that Toomer presently warmed up a bit and mentioned that, as a boy, he had been awarded a certificate of the Royal Humane Society.

Bosson muttered "No, no," and shook his head frowningly as though the thing were an indecency, but afterwards said: "Well, perhaps just as well," and put it down. The proof finally set forth the evidence Toomer would give, and Bosson so questioned his client as to stress the points favourable to his case. This proof afterwards formed part of the "brief" which, after consultation with Mr. Polechat's clerk, was marked "75 Gns." and left, with a mass of associated documents, at the great man's chambers.

Polechat, K.C., accepted the brief—or rather his clerk, who got a shilling in the pound out of his briefs, accepted it—and, three weeks before the date fixed for the hearing, Toomer was hailed up to London by a wire from Bosson, to attend conference with "Counsel"—hereinbefore called the Charles's. As the hour fixed was 10 a.m. Toomer travelled the 116 miles up to town from Nollingborough the night before, only to be told when he called at Noble and Bosson's at 9.30 a.m. that Mr. Polechat had to go into Court but would see him at 4.45.

Toomer accordingly called again at 4.30, Bosson engaging a taxi to carry them from Carey Street to the Temple and waving aside Toomer's gesture of paying for it with a lavish air scarcely reconcilable with the charge "disbursement 9d.", afterwards faithfully recorded in his bill. At the Temple Bosson said: "Better put away your pipe," and they went up an extremely dingy wooden staircase till they came to an excessively dingy door on the second landing, where Polechat's name was painted up among thirteen others, and waited in an outer office from 4.37 till 5.19.

Bosson was nervous. Polechat was an eminent advocate and an educated gentleman, and Bosson was not at all an eminent attorney and was so well aware of his inferiority in the other respect that he was ashamed of his client, who sat in a humble, loutish way on the edge of his chair, with his large, podgy hands dangling between his legs and his coat collar half up on one side, reeking of the provinces. At 5.19 a clerk snatched the door open and thrust in his head for an instant, and Bosson bounced from his seat as though stung.

"Come along! Never mind your hat," he said, and he hurriedly turned Toomer's collar down for him and spurred out of the room. Toomer, with half a stone of specifications, bills and correspondence under one arm, and the other clutching an umbrella and various drawing rolls like a game of spillikins, lumbered after him across a lobby into a tidy, plainly-furnished room where Mr. Polechat, a tall, vigorous, hatchet-faced man of seventy, with piercing grey eyes like crumbs of glass set close together in a grey face, was standing with his back to the fireplace, addressing someone who was moving to the door—"Don't!" said Mr. Polechat, "Remember—*Don't do it.*"

"Jago and Toomer" said Bosson at once (Polechat, as we know, had nothing to do with Jago's claim against Swillerton). "This is Mr. Toomer." Polechat, with his hands behind his back, bowed microscopically from the hips to Toomer—who at that moment dropped his umbrella—and said rapidly to Bosson, while he pointed the two men to chairs: "The important point is—Is, or is not, American maple wood not known to be unrefractory—not known, that is, to be unrefractory as a matter of ordinary technical building experience to an averagely reasonably intelligent person qualified in ordinary building practice answer me?"

Bosson turned to Toomer—"Is it? Is it?" Toomer, who was trying to dispose of his parcels, had not realized he was being questioned and did not know what the question was. "Well—er," he began, "If you mean——"

"You take the point?" Polechat went on to Bosson, who nodded. "We must have a witness to it, and in that case we may perhaps be hit to the extent of a ten-pound note."

Here he turned and consulted a slip of paper on the mantelpiece; he must also have given some private signal, for at that moment his clerk snatched the door open. "Rex and Bubber," said Polechat.

Bosson stood up and frowned and signalled to Toomer, who began to claw his parcels together again.

"That schedule of apportionment won't do," Polechat said to a group of three anxious-looking men who had immediately hurried into the room and occupied the chairs Toomer and Bosson had just vacated and which, on Polechat's busy days, never had a chance to cool, and he was closely engaged with his new clients as Bosson hustled Toomer through the door.

A young, elegant-looking man in morning coat, spats and striped trouserings, who had been sitting at the side of the room with his legs stretched out and his hands in his pockets, followed them. He said a laughing word to Bosson, took his silk hat, and left the chambers. Bosson at once said ominously—"Do you know who that was?"

"No," said Toomer in the tone of a man who never knows anything.

"Mr. Wrackem, our junior counsel—a very rising man," said Bosson as who should add "so look out!" Toomer thought that Wrackem might have spared a nod for the client who was feeing him, but he was past surprise at anything.

"It didn't take long," he said to Bosson, as they walked away.

"Mr. Polechat is a very busy man," the other replied, in a tone of reprimand. "You heard what he said? 'May perhaps get hit to the tune of a ten pound note?' I never knew Counsel give a more hopeful view of a case."

"But if we are," Toomer objected, after several seconds' heavy thought, "I shall have to pay the whole of the costs."

Bosson's reply was to say "Goodbye" suddenly, as though his client were too incorrigible an ass to waste words with.

The pleadings, or submissions, had been delivered to the arbitrator by a clerk of the solicitors for each party, who left the documents at Mr. Gizzard's office and took acknowledgments of receipt. These submissions, two in number, one signed by client and builder, the other by client and architect, had been carefully drawn by Counsel, and set forth briefly and exactly, in ordinary language, the grounds and extent of plaintiff's claim, and the contention by which the defendants jointly and separately sought to exculpate themselves. Each party had a copy of these documents, which constituted the terms of reference to the arbitrator, and which informed him of the issues he had to decide.

The arbitrator, thereafter, directed a preliminary hearing to be held to settle details of procedure and, in particular, to decide what the cost of reconstruction, in fact, was. The plaintiff Jago had employed an independent surveyor who had measured the work and prepared specification and secured tenders from five builders; the lowest tender had been accepted and the work of reconstruction was actually in hand. The amount of that lowest tender, viz.: £2,873, plus certain added fees and expenses the plaintiff had been involved in, amounting to £54, and plus a sum of £200 he claimed for delay in completion and "loss of enjoyment" consequent upon the collapse, totalling in all £3,127, was the amount of the damages the plaintiff claimed. The arbitrator realized that the claim for reconstruction was a question of fact which could be ascertained and ought to be agreed as a preliminary to the hearing of the cause: the other items, being discretionary, would be judicially considered by him, as arbitrator.

This preliminary sitting was held in the Gizzard's office, which was so convenient for that purpose as to suggest it was set apart for such grisly occasions. Leading Counsel did not attend, but were represented by their juniors. Swillerton had so marvellously brushed his hair that he appeared to be in disguise, and Toomer scarcely recognised him, and his difficulty in making up his mind whether the builder were friend or enemy was by this circumstance much increased. Wrackem, twice during the proceedings, apologized for fouling Colonel Jago's legs under the table, and Toomer had the experience of sitting opposite his late client for an hour and a quarter without once meeting his eye.

The arbitrator suggested that a still more independent surveyor should be appointed by the two defendants to examine and agree the cost of reconstruction, but after various difficulties and objections had been raised and disposed of, and Counsel had tripped each other up many times, Swillerton and Toomer were persuaded to agree the plaintiff's figure as the ascertained value of the work, without, of course, prejudicing their contention that neither of them was in any way liable and that the other was so.

On the afternoon of the day before the hearing, Toomer came up to town and called at Bosson's office. Bosson was out, but when at 7.0 Toomer returned to the Strand Palace Hotel, where he was putting up, he learnt that Bosson had telephoned asking that Toomer should ring him directly he came in.

There was no answer from Bosson's office, but when Toomer again returned to the hotel, shortly after eleven, he was told Bosson had been shrieking for him again and had given a telephone number at Esher. Finally Toomer got him at 11.20, and learnt that at 5.30 a wire had been received from Bristol saying that Polechat was engaged in Court there and could not appear next day. Toomer supposed that Wrackem would take his place, but Bosson said he had thought it "just as well" to brief a leader, and that Mr. Pitfall, K.C., had agreed to appear for them next day; and he went on to express annoyance that Toomer was not at his hotel when he rang up at six o'clock, and to appoint nine o'clock the next morning at the Municipal Surveyors' Institute, where the arbitrator was to sit, at 10, for Toomer to confer with Pitfall. Toomer objected that Pitfall knew nothing of the case. "I can't help that," Bosson retorted, with such tartness that the receiver brayed in Toomer's ear, and rang off and, presumably, got into bed again.

Pitfall, who proved to be a small, wiry, exhausted-looking man of fifty, frankly admitted that he had only had time to glance through his brief and knew nothing of the bag of papers, covered with Polechat's cross references and blue pencillings, bequeathed him by his learned and delinquent brother. He began asking questions; but his acute discernment and nimble wits left Toomer—who, given a week, could have presented an accurate and exact account of everything — helplessly stranded. Toomer knew little of points of law and Pitfall still less of the technicalities of building, and when he asked, "What is a wirecut?" Toomer, instead of answering, "A common kind of brick," lumbered off on an explanation of brickmaking processes. Time was soon up. "I shall not have to examine you until to-morrow," said Pitfall, "and I will get up the case tonight and see you here at nine again tomorrow."

The arbitrator sat in a vast room having a long table down its centre, covered with a thick, puce-coloured cloth, upon which quires of blotting-paper, ink-pots, pens and foolscap were exquisitely ranged out in a lavish way. At the head of the table was a great armchair with high upholstered back, which served to dignify the arbitrator and screen him from the devil's own draught caused by the hot air from a radiator chilling against the glass of the vast window behind him. At the other end of the room was a fireplace with a blackleaded iron fire-screen; and, centrally above the bare, black marble mantelpiece was the one striking decorative feature of the apartment—a large, splendidly-framed photograph of an unfinished sewage works, in a wide, duck's-egg green, bevelled mount, boldly titled with the contractor's name and address.

The plaintiff, his Counsel and certain clerks and witnesses sat on leather-upholstered mahogany chairs along the side of the table to the arbitrator's right; the defendants similarly ranged themselves on the left. The chair next the arbitrator on each side was reserved for the occupation of witnesses, as they were called. The arbitrator administered the oath to these successive witnesses in the following prescribed form: "Take bookinyer ry han. Gibble gabble gobble gubble quesyas mabeaskyer tougemat diffinref selpyergud"—that, at least, was all Toomer could make of it. Throughout the proceedings everyone remained seated—even when swearing and being sworn.

After a few introductions, bows and handshakings, and cheery or chaffing interchanges among the lawyers and arbitrator, as though they were all sitting down to a friendly game of poker, the proceedings began by Mr. Chawlegger, a plump, bald, red-faced man, spreading out his papers before him with the assistance of his junior, and opening the case for the plaintiff.

Mr. Chawlegger said that the task of the arbitrator would be lightened by the accommodating act of his client in agreeing to make his actions against the defendants a joint action, and in ascertaining and agreeing the cost of reconstruction. The question of the amount of damages incurred by his client was therefore greatly simplified and the task of the arbitrator reduced, otherwise, to deciding whether his client was entitled to damages—and he had no doubt that he (Counsel) would be able overwhelmingly to substantiate that claim—and, if so, whether the defendants were jointly, or severally, liable—i.e. whether Swillerton and Toomer were jointly liable for damages awarded, so that Jago could get payment of the whole from either of them; or whether each was liable for a separate amount, or if one only was liable, which of them.

"I will not," Counsel continued, "detain you, Mr. Arbitrator, with a statement of facts which will be clearly elucidated by the evidence I shall call, but I will take the opportunity of saying for my client what his native modesty (laughter)—native modesty will not allow him to say for himself. He is, sir, 'The Squire.' In all regards he upholds the honourable prestige of a title which once distinguished, beyond any rank of elevation, the leading country gentlemen of England. He is the Lord of the Manor of Grastopen, the occupier of the Hall, the benefactor of his tenants and the good genius of the village.

"In that last capacity Colonel Jago last year decided to bestow upon the village of Grastopen a Village Hall, built on freehold land, to be held in trust for the use and enjoyment, under certain seemly restrictions, of the inhabitants of Grastopen in perpetuity. It is because of that response to a generous impulse, Mr. Arbitrator, that my client comes before you today, a wearied, and disappointed, and disillusioned man. He comes here partly to reimburse himself for the heavy losses and inconvenience in which the negligence of the defendants, or one of them, has involved him; but he has come also, sir, from a sense of that public duty which demands of him, as a representative man, that he shall protect the community from the dangers which the negligence, incompetence and ineptitude of builders and architects may at any time inflict upon them. I will not detain you longer, Mr. Arbitrator, but will at once call my client, from whose own lips you will hear the plain story of the wrong which he lays before you in vindication of his rights as a man, and in his claim for restitution as an individual."

Colonel Jago then moved to the chair reserved for plaintiff's witnesses, on the right hand of the arbitrator, and was duly sworn.

(NEXT WEEK—ii : THE PLAINTIFF CLOSES.)

LANDMARKS OF THE YEAR

A Retrospect of 1929

BY PROFESSOR C. H. REILLY

It is, the author thinks, the day of the younger in spirit; architects are seen to be full of life and vigour, despite depressed commercial conditions. The usual array of "City architecture" is leavened by several churches and more than one municipal building of distinction. "Victorian fruitiness is giving way to neo-Georgian elegance."

LOOKING over the year's work one has the feeling that, however depressed the state of the country may be, architects are full of life and vigour. The profession as a whole may not be in the condition I am told holds good in Canada, where everyone has so much work on hand that no one can take on any more, and a leading insurance company has had to send a representative round the English Schools of Architecture to find young men willing to detail the interior and furnishings of their latest skyscraper, owing to the great firm of architects they employ on the other side having only time to design the exterior. No, we are certainly not, as a whole, like that! What I rather mean is that most of the work executed during the year, whether modernist or traditional or, as is more common, of the usual English compromise between the two, does not look so tired out before it is born as has sometimes been the case in recent years.

THE DAY OF YOUNGER MEN

It really looks, in spite of what I may call City architecture, as if the younger men—younger in spirit at any rate—are now getting a good look in. There is the Underground building, for instance, with its steel-framed logic forcing itself on our notice in a variety of ways, and throwing out a challenge which only the dullest can avoid meeting. Then there is Basil Ionides, going about with a few pieces of coloured material and glass in his pockets, and converting our hotels, theatres and restaurants, at a touch, from soft blurred rich nothingness into sharp bright happy places where even the oldest of us feel young again. Then there is one of our Rome scholars—a fact which proves his youth—Louis de Soissons, who has already made the only garden city which is modern without being garden-cityish, putting up great blocks of flats at Larkhall, Clapham, which show that Georgian breadth and modern solid Dutch balconies can become united into something new and stimulating. And Gordon Jeeves and Raymond Hood have put up, opposite to Liberty's toy Tudor block, a great strong black building which is nevertheless both modern and bright. This is quite enough to show it has been an exciting year. Let us now get down to details, since the space allowed is strictly limited.

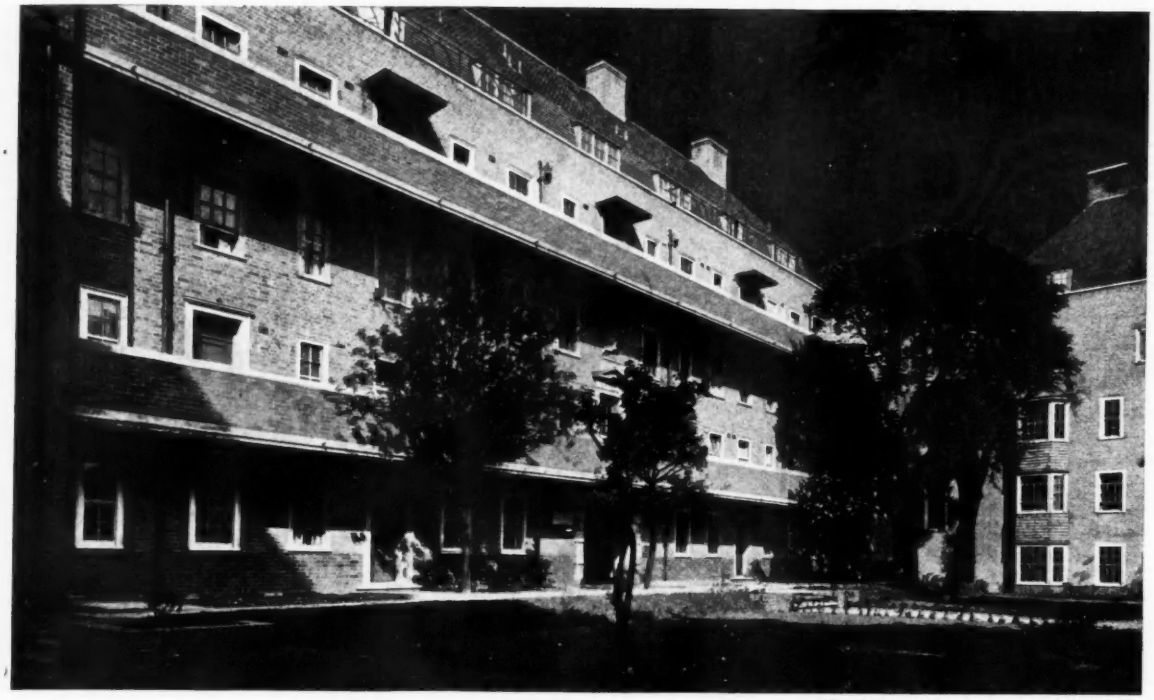
THE UNDERGROUND BUILDING

The Underground building, both from its size and the vigour of its form, claims precedence. Messrs. Adams, Holden and Pearson have adopted a type of building which, like the later American tall buildings, disregards the alignment of the street. This has occurred before, of course, notably in the new Grosvenor House building in Park Lane and in University College Hospital in Gower Street. The architects of the Underground building are,



[*By Adams, Holden and Pearson.*

"There is the Underground building, with its steel-framed logic forcing itself upon our notice in a variety of ways, and throwing out a challenge."



[*By Louis de Soissons and G. G. Wornum.*

"Blocks of flats at Larkhall, Clapham, which show that Georgian breadth and modern solid Dutch balconies can become united into something new and stimulating."



[*By Gordon Jeeves and Raymond Hood.*

"The famous black building for the National Radiator Company, veneered with polished slabs of black granite and decorated at the base and top."

however, more justified in that their building is on a corner site where several streets meet; but I should be sorry to see any of our main streets turning into a series of individual buildings with no relation to one another, as is so often the case in America. Apart from this independence of its surroundings and a certain apparent thinness in the walls, which we shall have to recognize as inherent in a veneered steel structure, it is fine to have a great new commercial building whose masses pile up so nobly, and whose lines are so clean-cut and decided. The one little detail to which exception has been taken, apart from the interesting sculpture which was bound to shock the man in the street, is the weakness of the arches (the only ones in the building) which link the wings to the central mass. That, however, is a small point. It is a great thing to have among us a building so truthful to its programme and to its construction, which relies so happily on the effect of its masses rather than on that of its detail. Here at last we are producing something masculine and entirely unaffected.

IDEAL HOUSE

The famous black building for the National Radiator Company in Great Marlborough Street, veneered with polished slabs of black granite and decorated at the base and the top with brightly enamelled copper sheeting, and with all the windows lightened

with gilded window-bars, is another brave, vigorous thing which makes 1929 a notable year. Here, again, the simple mass of the building is allowed to tell to the uttermost, the regularly spaced windows, all of the same size and shape, in no way interfering with it. Nevertheless, just as I hope we are not in for a series of diagonally planned tall buildings, which will play Old Harry with our streets, so for the same reasons I hope we shall not now have scattered about among more sober Portland stone or brick structures green, red, yellow or even black ones. A whole street of the latter, if you like. Nothing would be more effective—I remember a crescent on the front at Brighton in black brick—but not an indiscriminate scattering. This Radiator building has, by the way, a fine interior on the ground floor, with strong plain travertine walls and a massive stairway to the basement. The only weakness, I think, is in the ceiling, which is of an elaborateness unprepared for, and therefore slightly out of harmony with the rest of the structure.

MASONIC TEMPLE, MANCHESTER

To change now to another school of thought, let us turn to Dr. Percy Worthington's Masonic Temple at Manchester, the latest work by the architect we shall all delight to honour this year when he—the first provincial architect, if that phrase means anything today—receives the Gold Medal. This building, as I have said elsewhere, with its general air of repose and with the dignity of its great colonnaded Hall of Memory, through which every Mason has to pass to the lodge rooms, bars and restaurants, really deserves the title of "Temple." Till I went over it, I had secretly wondered what right Freemasons had to call their meeting and feasting houses temples. If, in future, they are like Dr. Percy Worthington's building, they will have every right. It is in the main a traditional building, but the front is minus a cornice, and with a great deal of plain wall surface, owing to the happy fact (for the architect at any rate) that the lodge rooms require no windows. The Temple itself has a great range of Ionic columns on either side and a semi-circular barrel vault lit through coffers in the ceiling—a rather doubtful expedient, this latter, I fancy. It is an arrangement the architect has used before in his Arts Faculty Building for the University, and on the whole a very impressive one. The rest of the rooms, which are really a vast series of club rooms, give the impression of a superior Athenæum, a result obtained by careful detailing. There is, too, a very brave curved staircase on a big scale, with the steps flying out of the wall, which delights one with its combined grace and courage.

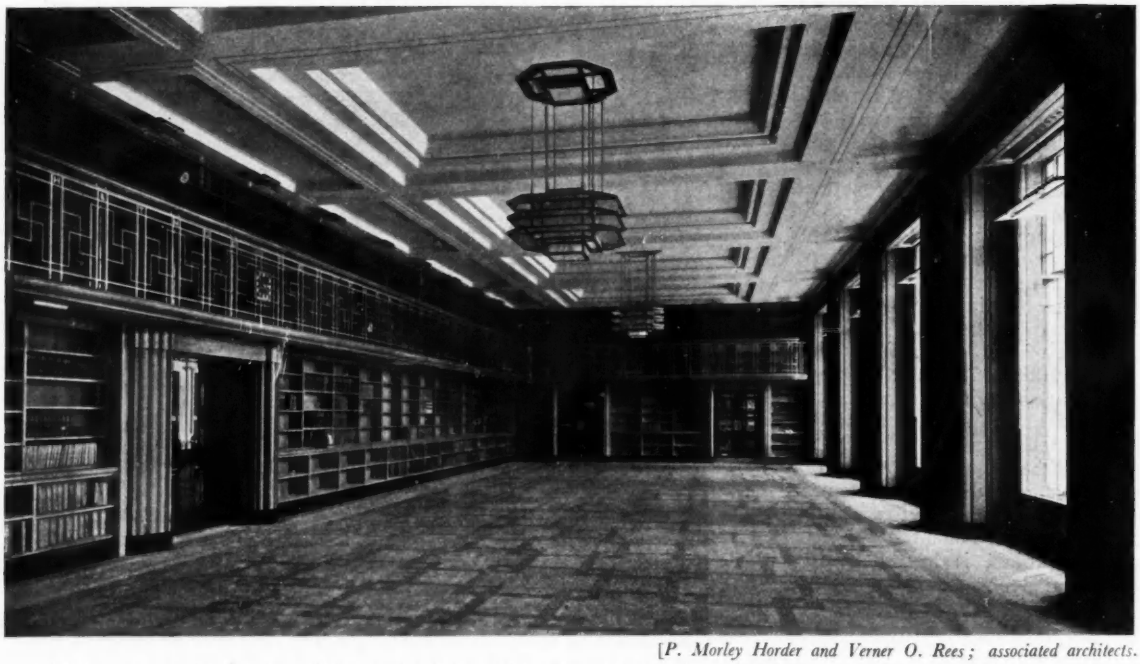


[*By Thomas Worthington and Sons.*

The Masonic Temple, Manchester. "This building, with its general air of repose and with the dignity of its great colonnaded Hall of Memory, through which every Mason has to pass, really deserves the title of 'Temple.'"

SOME MODERNIST BUILDINGS

Swinging back again to the more modernist work, there is the well-known house at Silver End by T. S. Tait, which looks bright and cheerful now. With the sunlight emphasizing its rectangular forms, and softened by trees, it is not so strange in reality as it appeared in the drawings. There are, too, the fine interiors of the London School of Hygiene and Tropical Medicine by Messrs. P. Morley Horder and Verner O. Rees, especially that of the



[*P. Morley Horder and Verner O. Rees; associated architects.*

"There are the fine interiors of the London School of Hygiene and Tropical Medicine, especially that of the library."

library. The exterior of this latter building, with its compromise between the older methods and the new, seems to me a little heavy, especially in some of its ornamental detail. The Firestone Factory, on one of the new arterial roads out of London, is much the same in this respect. This latter building is by Messrs. Wallis, Gilbert and Partners, who have built so many fine factories. The monumental, almost classical, appearance of the front of this one is probably due to a laudable desire to do deference to the main road on which it is built. The actual programme seems hardly to call for such treatment, and I am not sure that it would not have been better if the whole building had been frankly treated as a factory, instead of a factory hiding behind a sort of art gallery. The "art gallery" part, however, is very interesting in itself, and has a fine breadth about it. Striking colour effects have been obtained by the use in special places of glazed tiles, which have probably been introduced with a view to their advertising value on motorists going by at sixty miles an hour—a rather difficult addition to the architect's programme.

FIRST CLUBLAND CHURCH

Neither old nor new, but fresh and delightful, like his well-known Acton Church for the Deaf and Dumb, is Edward Maufe's new church at Walworth. It has been called "The First Clubland Church." As in his other building, this one has the church proper on an upper story, but it is not raised to the same extent and the building has not therefore quite the same romantic-looking exterior. Here the church has a narthex between the



[*By Wallis, Gilbert and Partners.*

Firestone Factory, Hounslow, by night, "hiding behind a sort of art gallery. The 'art gallery' part has a fine breadth about it."



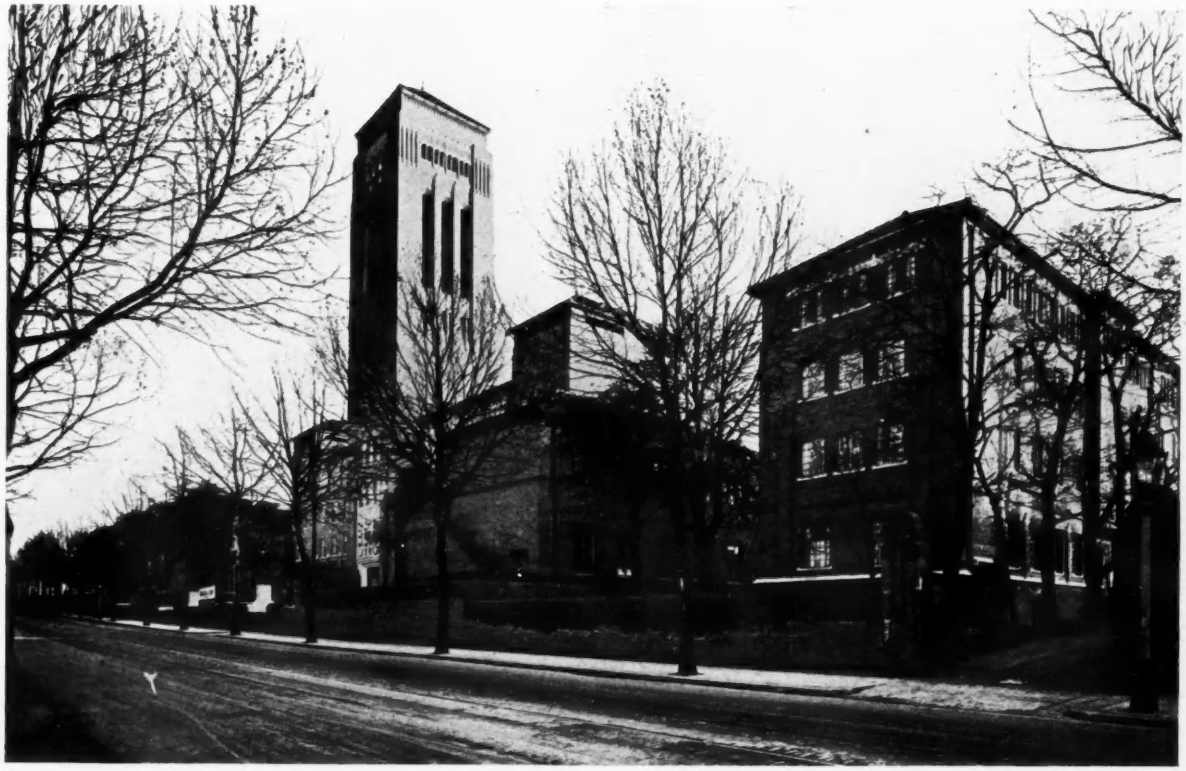
[*By Edward Maufe.*

"The First Clubland Church, Walworth, has a narthex between the staircase towers, from the terrace in front of which outdoor services can be held."



[*By Home and Knight.*

"The Bournemouth Pavilion is one of the best buildings which has come out of an open competition of recent years."



[*Gordon and Viner and Sir Giles Gilbert Scott; associated architects.*

"The great group of buildings for the Salvation Army, at Denmark Hill; a fine monumental quality which flows naturally out of the planning. The fine strong square tower is one of Sir Giles's best, somewhat like a simplified brick edition of his great tower for Liverpool."



[By the late Sir Robert Lorimer.

Stowe Chapel. "A chapel in some contrasting manner would have been a better compliment to the work of the brothers Adam."



[By T. Cecil Howitt.

"The Council House at Nottingham is an impressive classical structure, with a great pediment and a tall dome"



[By Paul Phipps.

The new Church of Christ Scientist, Kensington. "Its modernism is very English and gentle."



[By Sir Frank Baines, architect. Alfred Cox, associated architect.

Imperial Chemical House, Millbank, photographed from the now demolished Lambeth Bridge. "Its Lutyens-like composition certainly carries well."



[*By Sir Edwin Cooper.*

Royal Mail House, a great City building designed "to express commercial success and then, and then only, to provide so much office space. It can be no easy matter to get fine classical plan forms on to a City site."

two staircase towers, from the terrace in front of which outdoor services can be held, with the congregation in the courtyard of the building. The interior has a painted timber roof like the Acton one, but not so fine an east end.

The long single-light windows, with their interesting arches made up of series of ogee curves, rather reminiscent of Sweden, are an interesting feature inside and out.

SALVATION ARMY HOSTEL

Slightly akin to this church in its semi-romantic brick architecture is the great group of buildings for the Salvation Army at Denmark Hill by Messrs. Gordon and Viner and Sir Giles Scott, which is one of the most important undertakings of the year both in size and achievement. Here is a great training institution economically built, which might very easily have looked like a barracks or a workhouse. Instead, by good simple building, with broad stretches of fine brickwork, and windows so placed and divided as to form an interesting foil to it, and without any definitely architectural feature save a tower (using the word "architectural" in a restricted sense), the architects have achieved a fine monumental quality which flows naturally out of the planning. The projecting of the two staircases, for instance, to each hostel block, placed naturally one-third of the way from either end, makes a pair of strong vertical elements, such as modern German architects are so fond of, while the overhang of the roofs everywhere at the same level gives the necessary horizontal emphasis. The fine strong square tower is one of Sir Giles's best, somewhat like a simplified brick edition of his great tower for Liverpool.

BOURNEMOUTH PAVILION

The Bournemouth Pavilion, by Messrs. Home and Knight, is one of the best buildings which have come out of an open competition of recent years, and somehow, neither externally nor internally, looks like a competition building.

Its detail, though not modern in



[*By Sir Edwin Cooper.*

Gray's Inn Library : the front to the Square.

the strict sense—it appears to be based on Soane, the modernist of his time—has too individual a flavour for the work of the man hurrying on to the next gamble. One expects a good plan, of course, in a competition building, and the plan here is particularly spacious and effective, especially for the circulation of large crowds.

The building, placed in the public gardens, has wisely been kept low. and, while admitting cornices, pilasters and other classical features, is very broad, strong and massive in its general composition.

NOTTINGHAM EXCHANGE

The Council House at Nottingham, by T. Cecil Howitt, is another great municipal building, this time placed rather magnificently at the head of the market square and no doubt appealing very much to the pride of the councillors.

It is, indeed, an impressive classical structure, with a great pediment and a tall dome such as one did not imagine would be built again until some classical revival, perhaps a hundred years hence. There is no denying this exercise in standard forms is imposing both within and without. It shows the safety of such forms, and "safety first" for great municipal structures is not a bad maxim. Nottingham has given herself a great advertisement with the general public—one that all can read—but Stockholm has given herself a better, which, though few can read it, nevertheless provokes discussion. Some advertisers think that is, after all, the best form of advertisement.

CHURCH OF CHRIST SCIENTIST

There is one more semi-modernist building to be mentioned, and then we come to the City architecture, which I have left to the end because we seem to know all about it beforehand. It is the new Church of Christ Scientist, by Paul Phipps, in Kensington. Its modernism, indeed, is very English and gentle. It consists chiefly in simplifying the ordinary classical detail, while keeping to Wren-like proportions.

This makes a very pleasant exterior in brick and stone, with a side doorway under a big window as at St. Paul's, without, however, any of the baroque swagger of Wren's splendid feature. Nevertheless, Mr. Phipps's method suits our present mode of thought.

His interior, too, is not unlike that of a Wren church, with its galleries pulled out and its ornament shaved off. It is a good meeting-house, with a reduced Wren organ as the central feature.

STOWE CHAPEL

I suppose I ought to mention Stowe Chapel. If Sir Robert Lorimer had not died I should have dealt with this building at length, not because I think it a good building, but because I think it a great pity to strain classical proportions, as he has done both externally and internally, so near a great example of the accepted way of using them.

If nothing more sympathetic to the old work could be managed by the architect, a chapel in some contrasting manner would have been a better compliment to the work of the brothers Adam.

ARCHITECTURE IN THE CITY

Imperial Chemical House, by Sir Frank Baines, and Royal Mail House, by Sir Edwin Cooper, are great commercial City buildings wherever they may be, both designed, one feels, to express commercial success and then, and then only, to provide so much office space. Of the two I prefer the Royal Mail building. The architect appears to have the greater scholarship at his command. Perhaps from the distance Imperial Chemical House (what a dreadful name !) is the more effective. Its Lutyens-like composition certainly carries well. The Royal Mail building seems overloaded in detail for the narrow streets of the City. Internally, however, Sir Edwin Cooper's halls and windows are becoming quite like Adam in their simple shapes and reserved detail. These appeal to me much more than did those of his Port of London building or even of his Lloyds building. As usual, they are all very skilfully planned. It can be no easy matter to get fine classical plan forms on to a City site. The City of London will no doubt be the last stronghold to surrender to the modernist movement, and probably Sir Edwin the last architect.

Nevertheless, it is clear that that movement is already having a simplifying effect even on banks and shipping offices. Victorian fruitiness is giving way all round to neo-Georgian elegance, as the Royal Mail interior proves.

STRONGHOLDS OF INDUSTRY

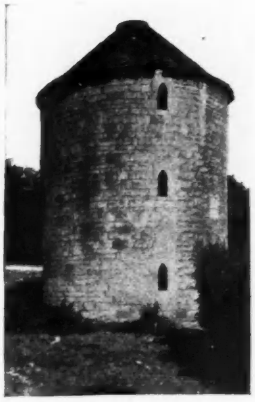


Figure one. A roadside wool-drying tower, at Frogmarsh.



Figure two. Merrett's Mill, Woodchester; the remains of an early fulling mill, with millmaster's house adjoining.



Figure three. The owner's summer or music house at Frogmarsh.

The Cloth Mills of the Cotswolds

BY THOMAS FALCONER

THE beautiful stone-built cloth mills in the Stroudwater valleys of Gloucestershire were erected in the eighty years between 1760 and 1840, that period known as the Industrial Revolution, when the inventions of power loom and spinning jenny overthrew the domestic system.

Before this period cloth weaving had been a cottage industry, carried on with the simple tools that had changed but little since the fourteenth century. In the early days of the domestic system the only process necessarily carried out in a mill was the fulling or felting of the cloth. The millmaster of the valleys followed in his style of building the woolman of the hills, and

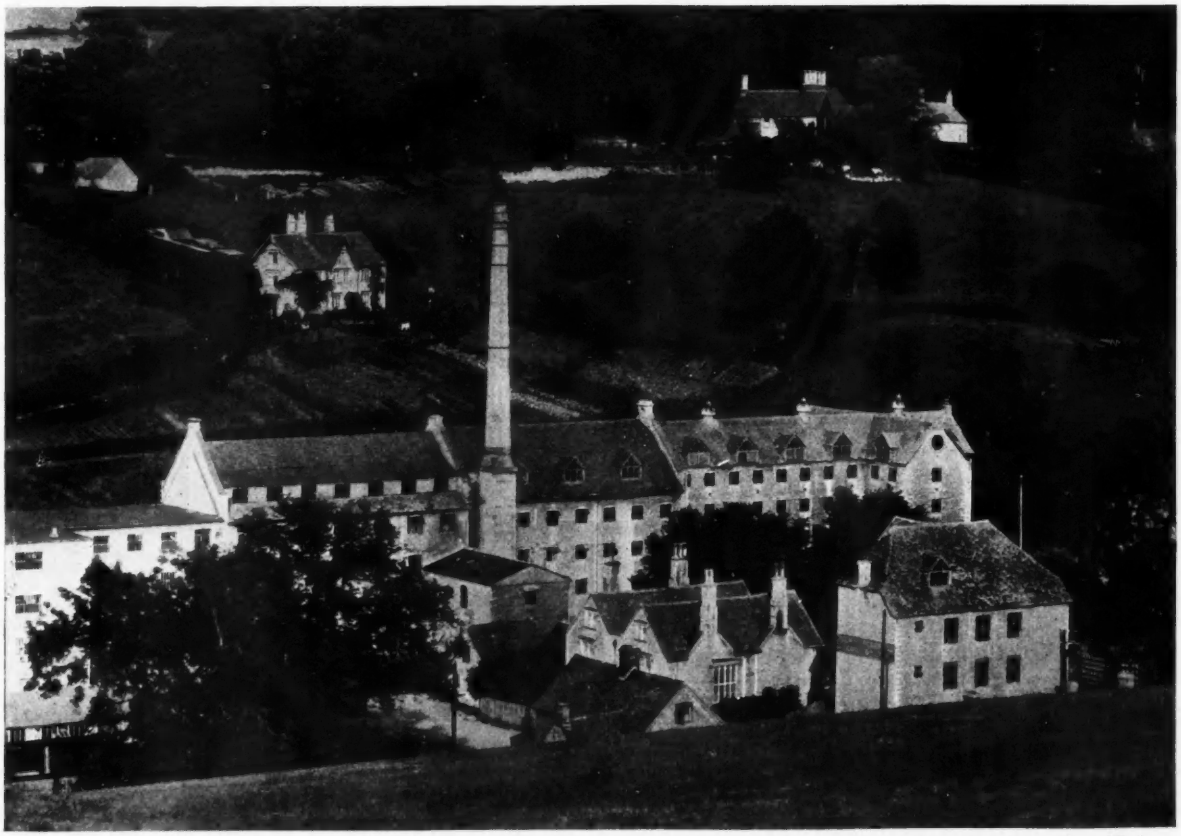


Figure four. Looking down from the hillside on Dunkirk Mill buildings, erected between 1798 and 1855. It will be noted that some of the buildings—for example, those on the right—are of the Cotswold gabled type.



Figure five. The bell- and dove-cote at Dunkirk Mill, one of the minor architectural features to be found in abundance in the stone buildings of the Stroudwater valleys.



Figure six. A nearer view of part of Dunkirk Mill, design. In the foreground is the tennis court of the celebrated novel,



Figure eight. Woodchester Mill, a typical example of the Renaissance style of architecture, characteristic of the majority of the mill buildings in the district. It was probably erected about 1740.



showing, more clearly, the details of the typical gable private garden. This is the mill of Miss Mulock's John Halifax, Gentleman.



Figure seven. Another interesting detail: the bell cupola at Woodchester Mill, pictured at the bottom of the facing page, seen here at close quarters. It is very similar to that of Hope Mill.

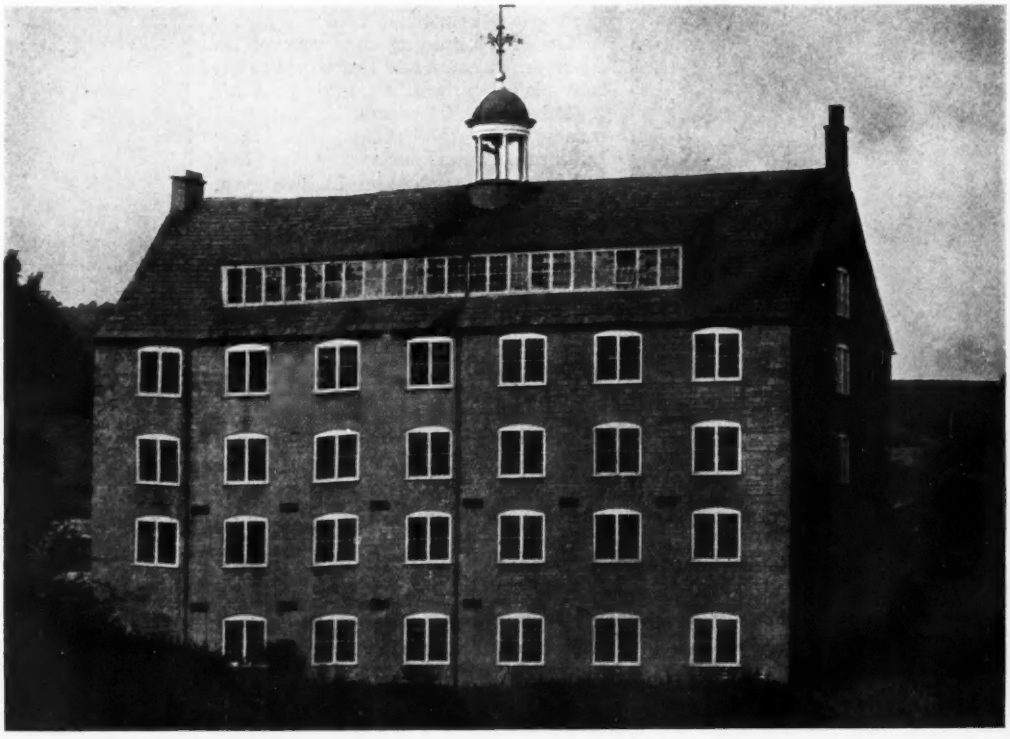


Figure nine. Hope Mill, Brimscombe. Though smaller than Woodchester, it has obvious points of similarity. It is interesting to note that the architectural style does not necessarily indicate the date, however.

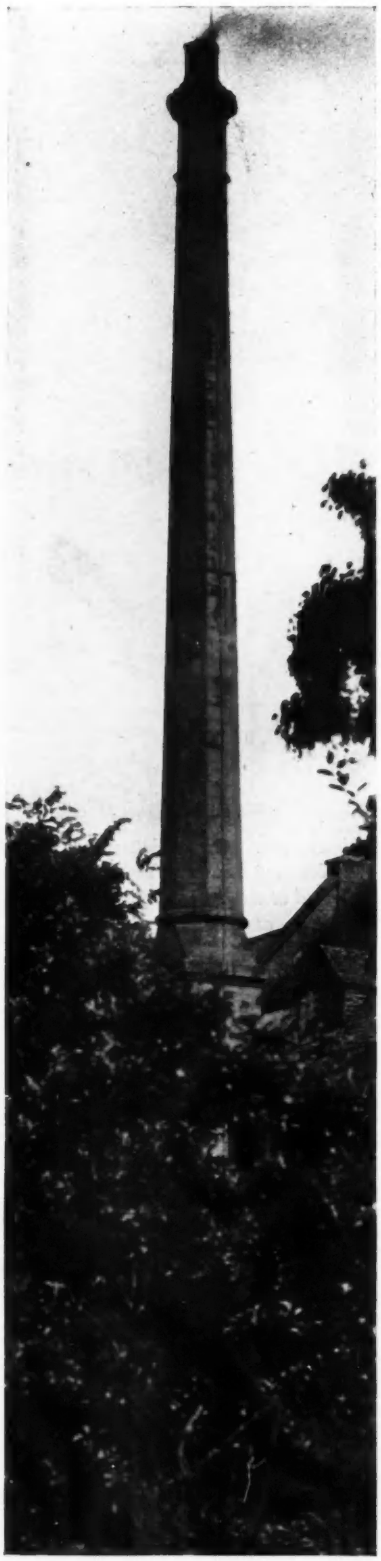


Figure ten. The graceful chimney-stack of Dunkirk Mill, one of the tallest in the whole of the Stroudwater valley district.

beside the streams are found gabled and stone-tiled houses of great interest. The remains of an early fulling mill with millmaster's house adjoining is seen in Merrett's Mill, Woodchester (figure two), dated 1672.

Nearby these early mills are sometimes found the strange martello-like towers, which were built as drying chambers for the wool after it had been scoured and rinsed. Their floors were latticed to allow the hot air from the fires on the ground floor to pass through the wool and out by the flue in the roof-apex.

There is a good example by the roadside at Frogmarsh (figure one) in the Woodchester valley. These towers are much like those dovecots that display the ingenuity of the tiler and the way in which he worked up his stone tile on the curve. In passing, it may be of interest to observe that the large jars, now keenly sought for by collectors of garden ornaments, were imported by the millmasters from the Mediterranean as containers of the Gallipoli oil used on the wool before the process of carding. These jars were then given out by them to the cottages and inns around as vessels for the collection of the urine in which the wool was boiled in order to loose it of its natural grease. The mill at Frogmarsh has undergone many changes, but the summer or music house (figure three) built by the mill owner for his Dutch garden still stands, though the garden has gone.

The mills of the late eighteenth and early nineteenth centuries, though built in a difficult period and to house the new machinery, display the fitness for purpose and generosity of spirit inherent in the earlier stone masons of the Cotswold district. The mill owner of the day, retaining the pride of his forebears in home and hearth, reflected that right spirit of ownership in his mill building. Records of the mill owners and the occasion of their building schemes have come down to us, but in very few cases can the identity of designer, master builder or men employed be established.

The mill buildings sometimes follow the form of the Cotswold gabled type, as in the case of the Dunkirk Mills (figures four and six), but were more often of a Renaissance pattern, as in the cases of Woodchester Mills (figure eight), Hope Mill, Brimscombe (figure nine), and Fromehall Mill (figure eleven). The type does not necessarily indicate the date, for the Dunkirk Mills were built in sections between the years 1798 and 1855, whereas the Woodchester Mill was probably built about 1740. Dunkirk Mill is the mill of Miss Mulock's famous novel, *John Halifax, Gentleman.*

There are many interesting minor architectural features in these mills, such



Figure eleven. Nor is this smaller example, at Fromehall Mill, a Renaissance building, devoid of proportions of elegance.

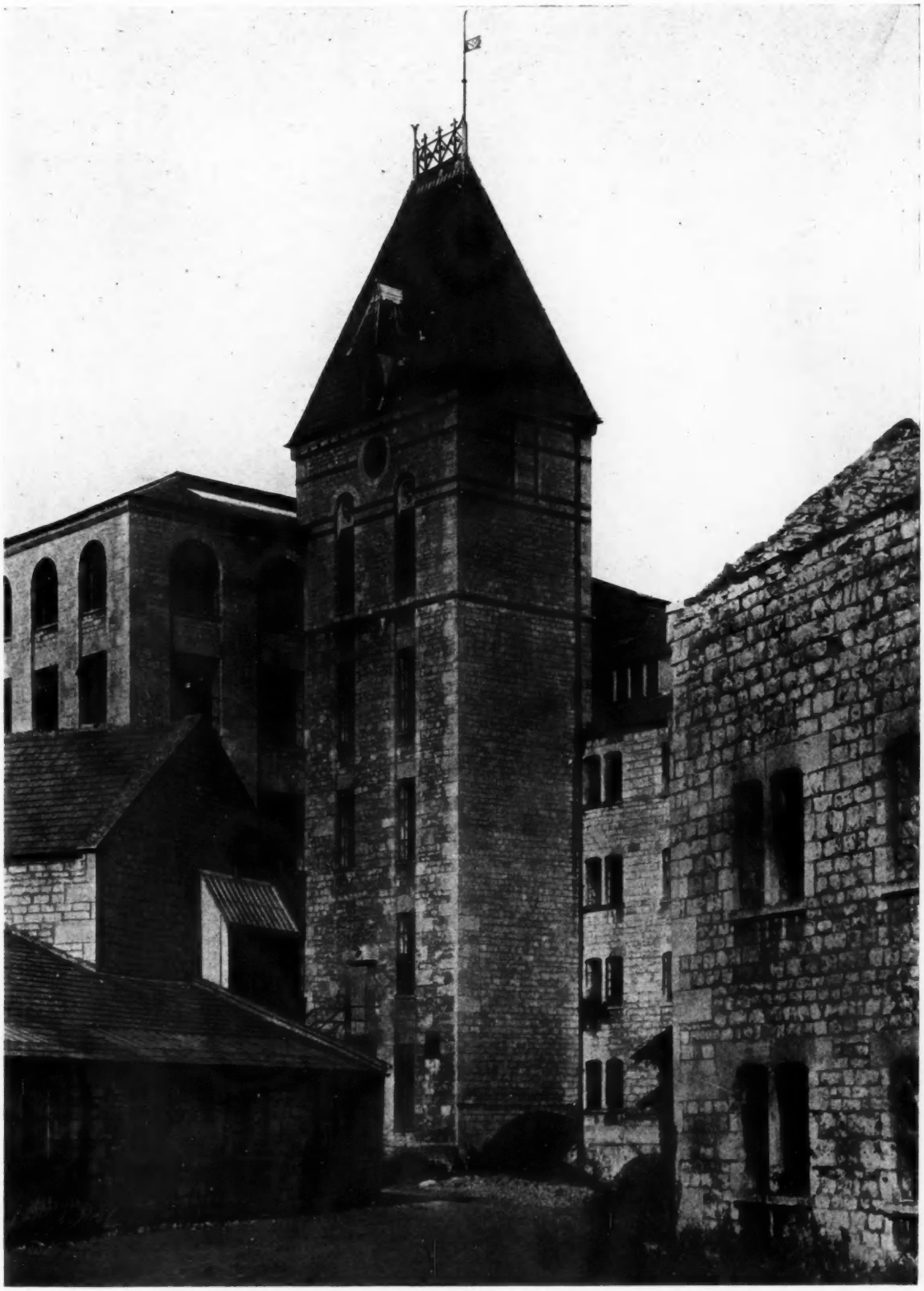


Figure twelve. Mr. Bodley designed this Gothic tower of Ebley Mill while in the district about the building of the neighbouring church at Selsley, which dates from the middle of the nineteenth century.



Figure thirteen. Stanley Mills, the measured dignity of which bears witness that even so late as 1850 the tradition of good mill building had not departed.

as doorways, bell- and dove-cotes, and bell cupolas. Figure five shows the dove- and bell-cote at Dunkirk Mill, and figure seven the bell cupola at Woodchester Mill. Hope Mill (figure nine) has a like cupola, and is in many ways similar to Woodchester Mill. Nor must the graceful chimney-stacks pass without notice. One of the largest is at Dunkirk Mill (figure ten); and the stack at Fromehall Mill (figure eleven) is not without grace. Some of the later mill work is very well done. Ebley Mill (figure twelve) boasts a Gothic tower designed by Mr. Bodley when he was building the neighbouring church at Selsley, celebrated for its windows by Burne-Jones, D. G. Rossetti, Holman Hunt, and William Morris. Stanley Mills (figure thirteen) show that even in 1850 the tradition of good mill building had not altogether departed. Although the mills have by this time passed to other hands and other trades, here and there records of their past importance are preserved. At Woodchester Mill is a painted board (figure fourteen) recording a visit of King George III, who honoured the mill with his presence in 1788, and, if truth be told, was seen with a rent in his coat-sleeve by a vast concourse of near 30,000 people.

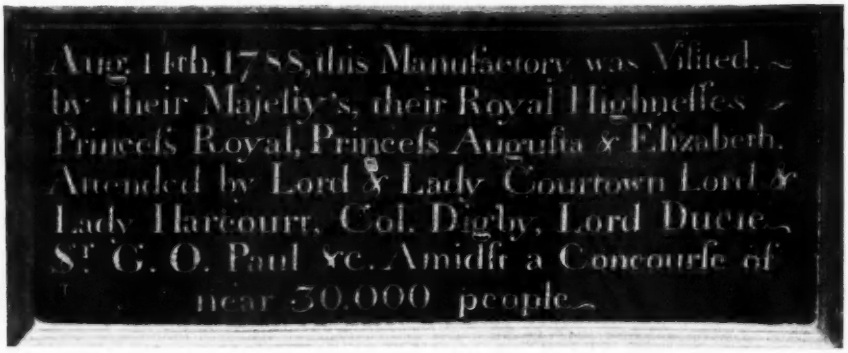


Figure fourteen. This board records a visit of King George III and members of the Royal Family to the Woodchester Mill—an event that attracted a crowd of sightseers.



BUCKINGHAM HOUSE, ST. JAMES'S PARK: THE ORIGINAL BUCKINGHAM PALACE

From the water-colour by Edward Dayes, signed and dated 1790, engraved by S. D. Soiron, in 1793, under the title "Promenade in St. James's Park," and reproduced as one of the colour plates in A History of British Water-Colour Painting, *by H. M. Cundall, I.S.O., F.S.A., formerly Keeper of the Department of Paintings, Victoria and Albert Museum. Published by B. T. Batsford, Ltd., London.*

(*See the Book Review pages in this issue.*)

FOUR DRAWINGS

from

SALIES-DE-BÉARN

Basses Pyrenées,

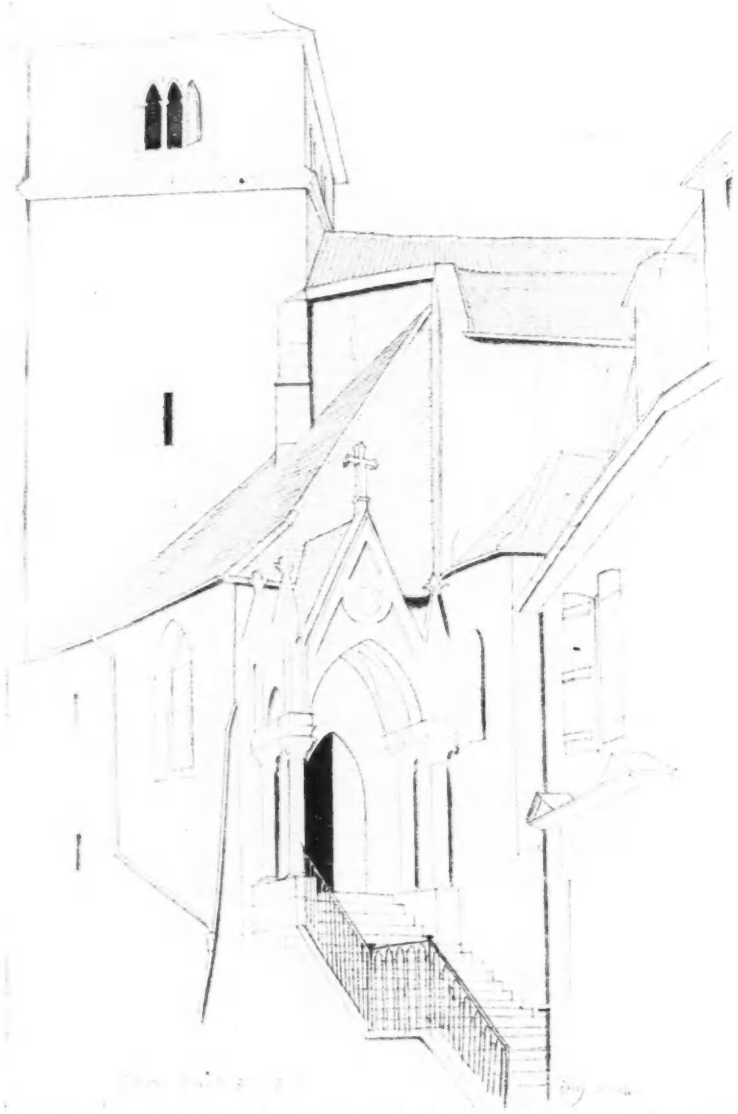
France



Doorway at Salies-de-Béarn.

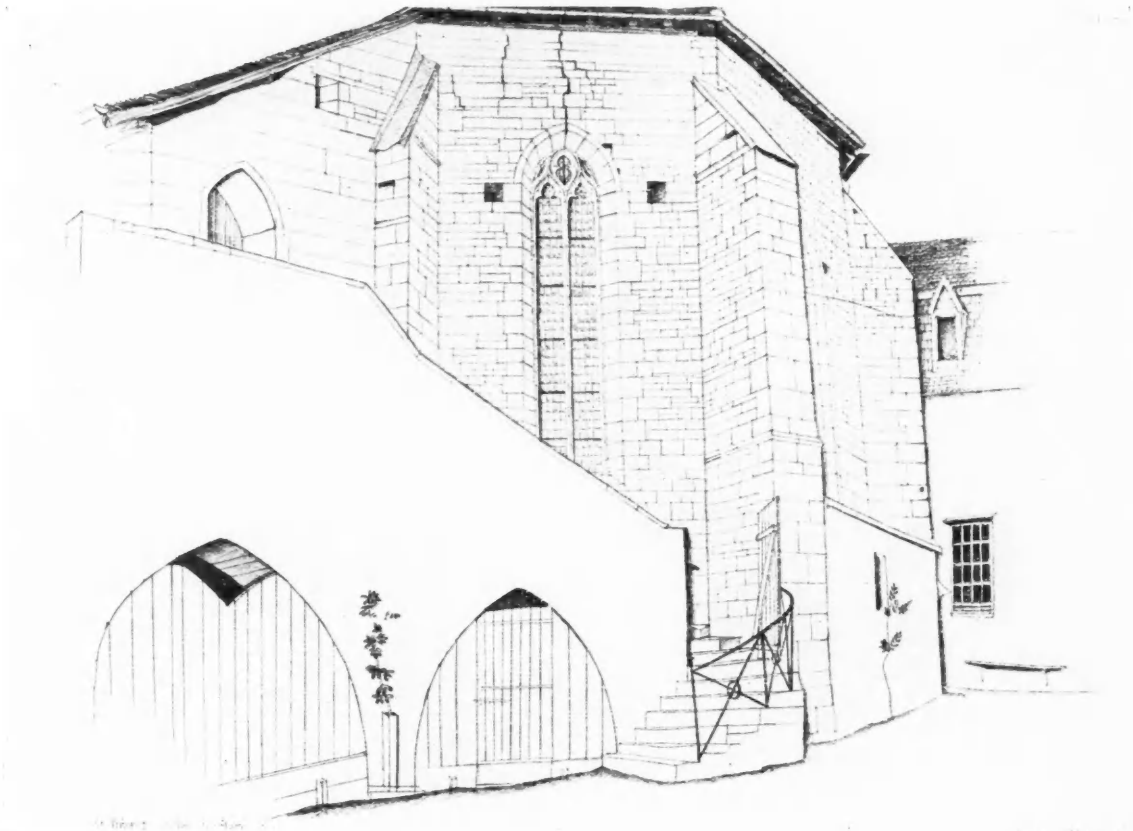
BY

ERIC GILL



South Porch of the Church of St. Vincent, Salies-de-Béarn, Basses Pyrenées, France.

Drawn by Eric Gill



Apse of the Church of St. Vincent, Salies-de-Béarn, Basses Pyrenées, France.

Drawn by Eric Gill



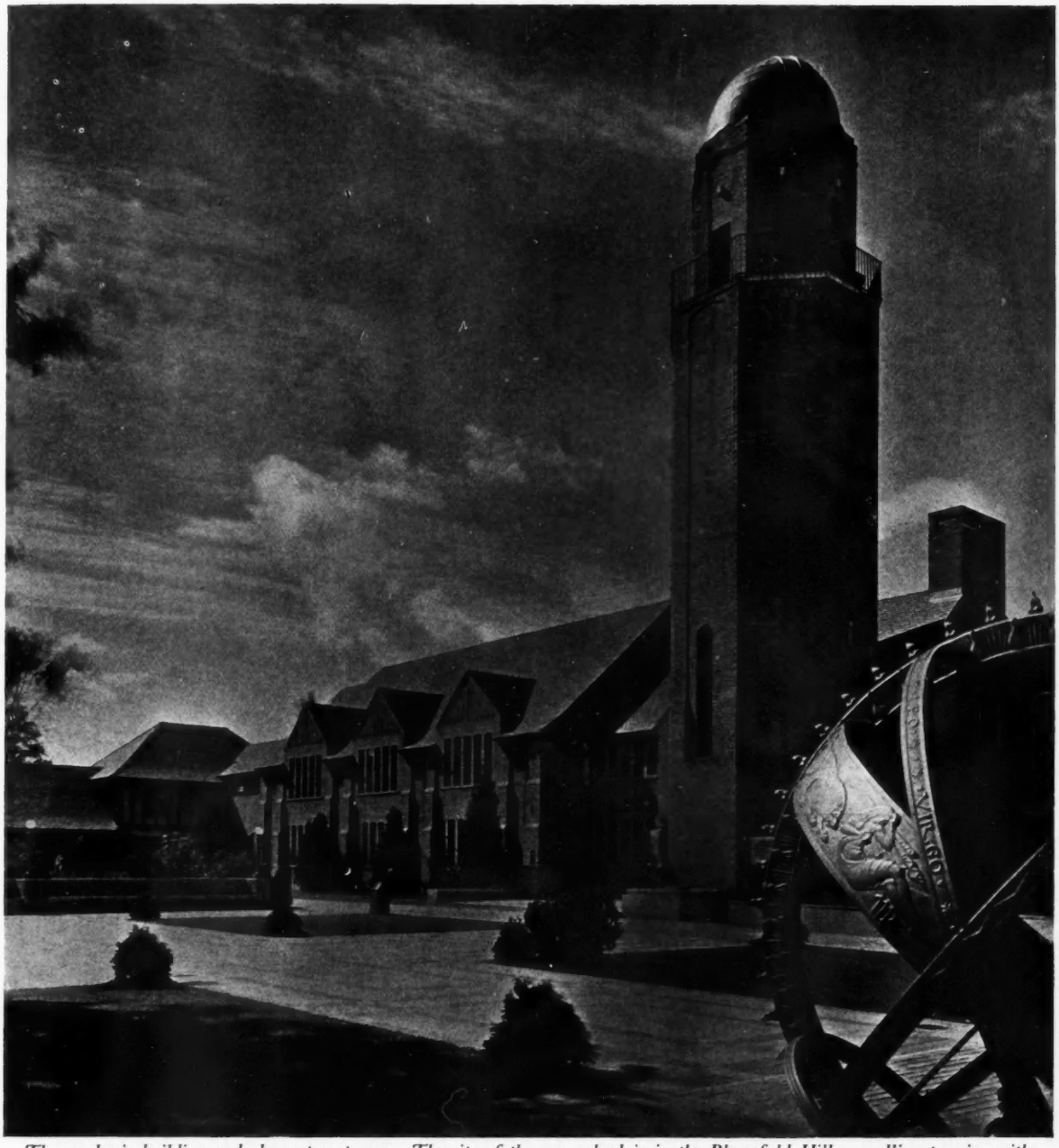
St. Vincent's Church (from the east), Salies-de-Béarn, Basses Pyrenées, France.

Drawn by Eric Gill

CRANBROOK SCHOOL, DETROIT, U.S.A.

A Unique American College Scheme

DESIGNED BY ELIEL SAARINEN

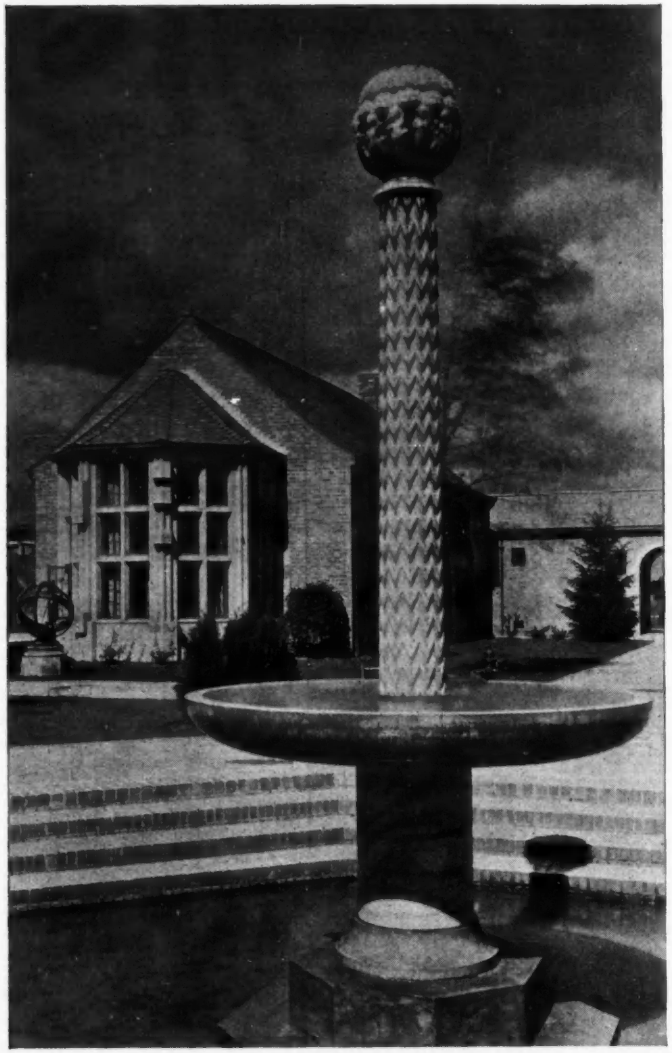


The academic building and observatory tower. The site of the new school is in the Bloomfield Hills, a rolling terrain, with magnificent scenery. In the foreground is an astrolabe of ancient pattern, with the Zodiacal signs, etc.

ELIEL SAARINEN, the Finnish architect, was first recognized in America in 1925, when he secured second place in the competition for the *Chicago Tribune* building. His design was never executed, but it is generally regarded as having had a marked influence upon the appearance of American skyscrapers erected subsequently. Curiously enough, it also paved the way for the early entry of this architect into a sphere more natural to his artistic temperament, for in 1926 he was commissioned to design the Cranbrook School.

This school is now being erected through the munificence of Mr. and Mrs. George G. Booth. The scheme includes separate schools for boys, girls and small children, a school of arts and crafts, and an academy of fine arts.

The buildings at present completed are the main school unit, a gymnasium,





The fountain court and the study hall. The buildings are planned and grouped around a number of flagged courtyards, in a manner entirely different from the conventional American collegiate plan. The ball at the summit of the fountain is carved with a design of pastoral figures alternating with open-mouthed heads of lions, etc., contrasting effectively with the repetitive toothed pattern of the column itself, which is of sandstone. The building behind it is the library.





Cranbrook School, Detroit, U.S.A.] [*By Eliel Saarinen.*

Two entrances. That on the left is a near view of the entrance to the study hall, shown on the right, above. The door and architrave are of oak, and on either side is a sandstone column, which will support a sculpture. The door panelling itself is of diamond pattern, and on the architrave are boldly carved panels, with a figurehead representing Knowledge. The other doorway leads to the dormitories. It owes a good deal to the modernistic bronze light standard—a pergola, not here illustrated, is somewhat similarly treated—and the coffering above. The steps are of hard-burnt brick.



museum, dining hall, dormitories, an infirmary, faculty residences, and service buildings.

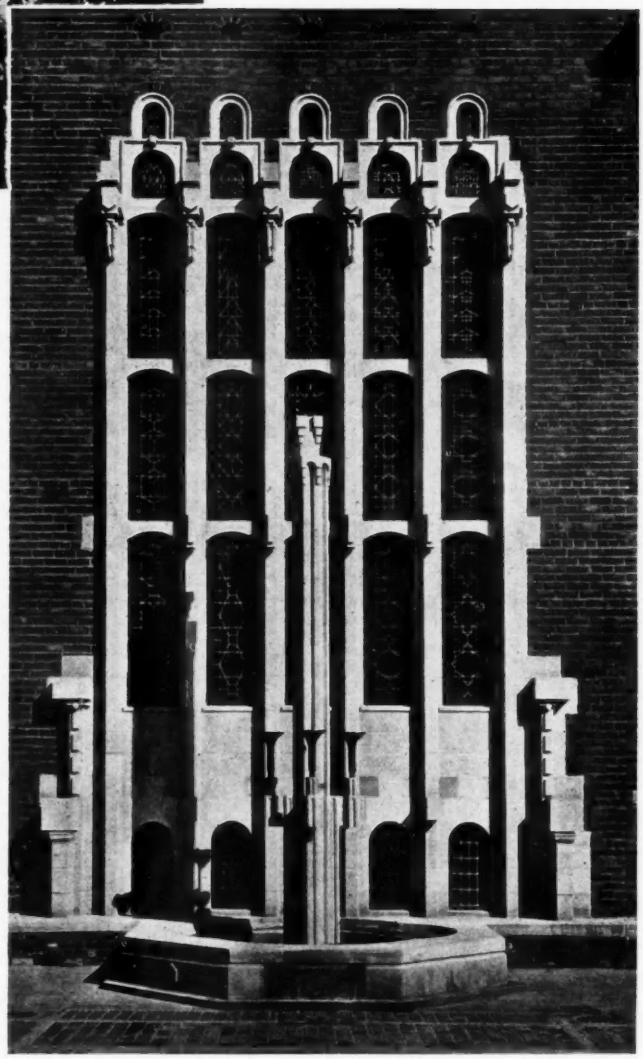
The site of the new school is in the Bloomfield Hills, which are situated about ten miles to the north of the city of Detroit. Here the school authorities possess about seventy-five acres of rolling terrain, with magnificent scenery. The site has unusual attractions. There is, for instance, a delightful valley through which runs a stream broken by islands covered with clusters of willow trees. This part of the site has been converted into a lagoon, and on the main island a rustic cabin has been built for camp-fire celebrations.

In short, the site offered an opportunity that comes rarely enough to any architect for the erection of a fine architectural conception, planned and designed in the grand manner. This opportunity has been grasped and exploited to the full by Saarinen.

In placing the buildings he has abandoned the conventional American collegiate plan. Instead, his buildings are admirably grouped and planned around a number of courtyards. In design and detail they reflect the strong individuality of the architect.

The observatory tower, the entrance to the study hall, the window to the dining hall, and the fountain in the fountain court are among the exterior details already completed that serve to give earnest of his quality. The observatory tower stands at the corner of the academic building. It is of brick, octagonal in shape, with deep circular-headed staircase windows. Above the gallery, surrounded by a railing of simple design, it is set back, and surmounted by a brick cresting and a movable dome. The study-hall entrance is a typical composition of stone, brick and wood. That most of the interior details, as well as those exterior ones mentioned, are of equal interest and character readers may be left to judge from the illustrations.

The structures are built in a yellowish brown tone of brick, among which the darker elements produce a delightful play in colour. Dressings are of sandstone. Much of the layout of gardens, lawns and brick and flag paving has been completed, so that it is possible to judge the buildings in conditions of something like permanence. That judgment can hardly fail to be that Cranbrook School bids fair to be an architectural masterpiece.



The dining hall. All the school buildings are in a yellowish-brown tone of brick, with sandstone dressings. Here and there a single brick is allowed to project to add texture to the surface.

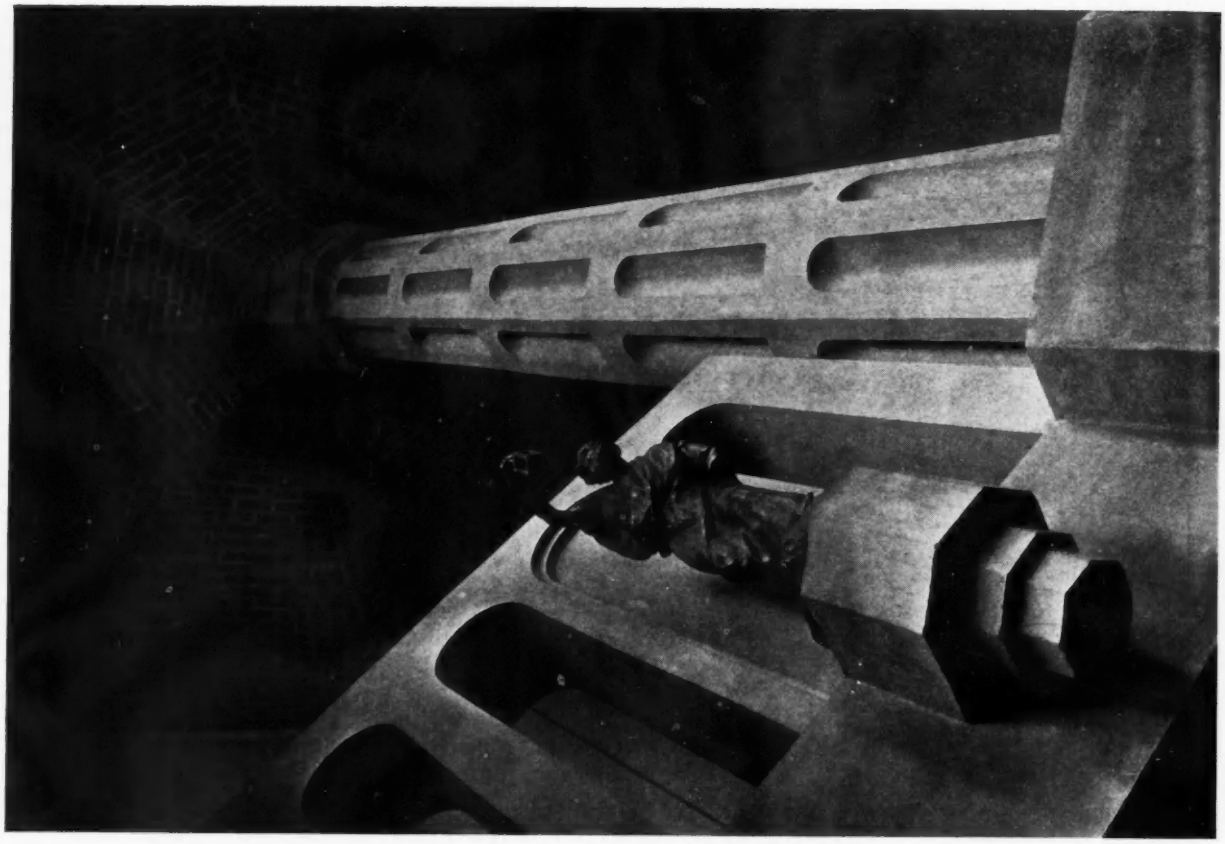
Cranbrook School. By Eliel Saarinen.

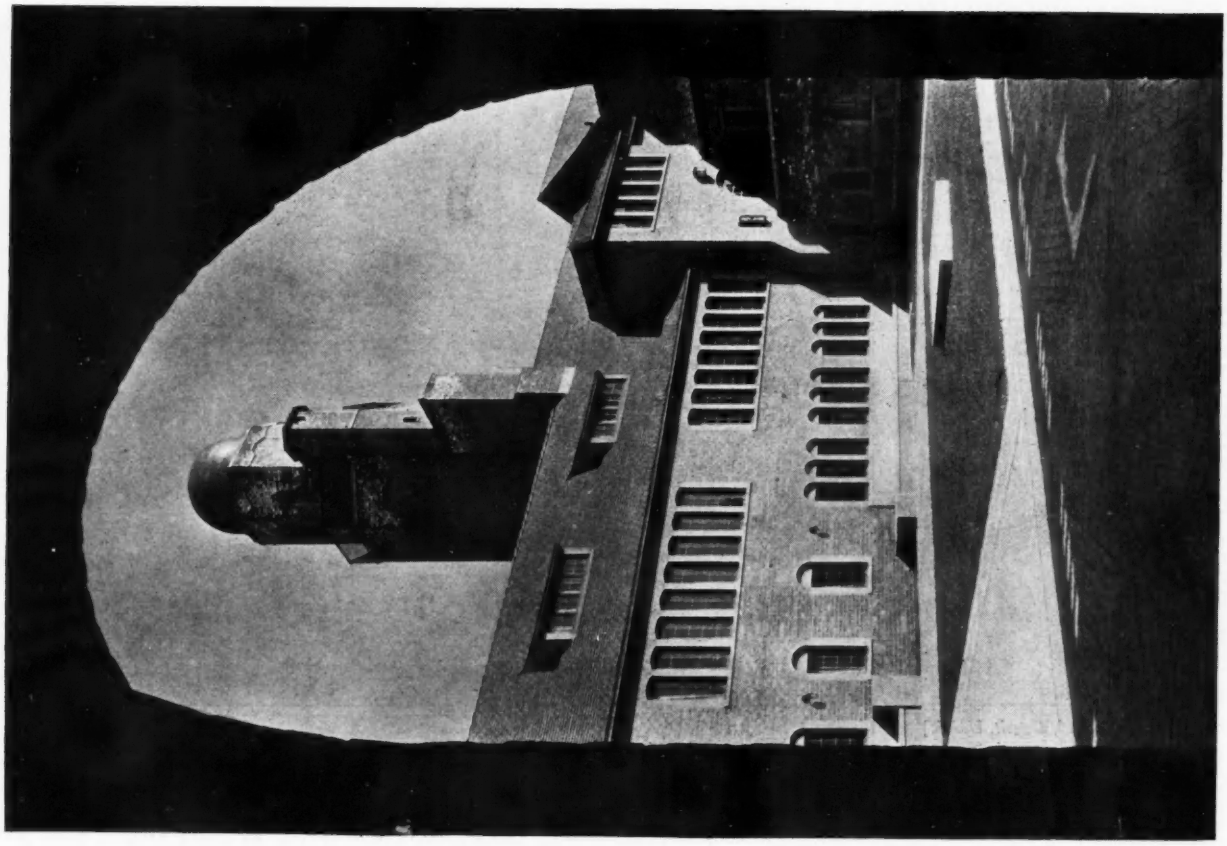
A near view of the stone window treatment of the dining hall, illustrated above, with octagonal-based detached fountain. The brickwork repays careful examination.



Cranbrook School, Detroit, U.S.A.] [*By Eliel Saarinen.*

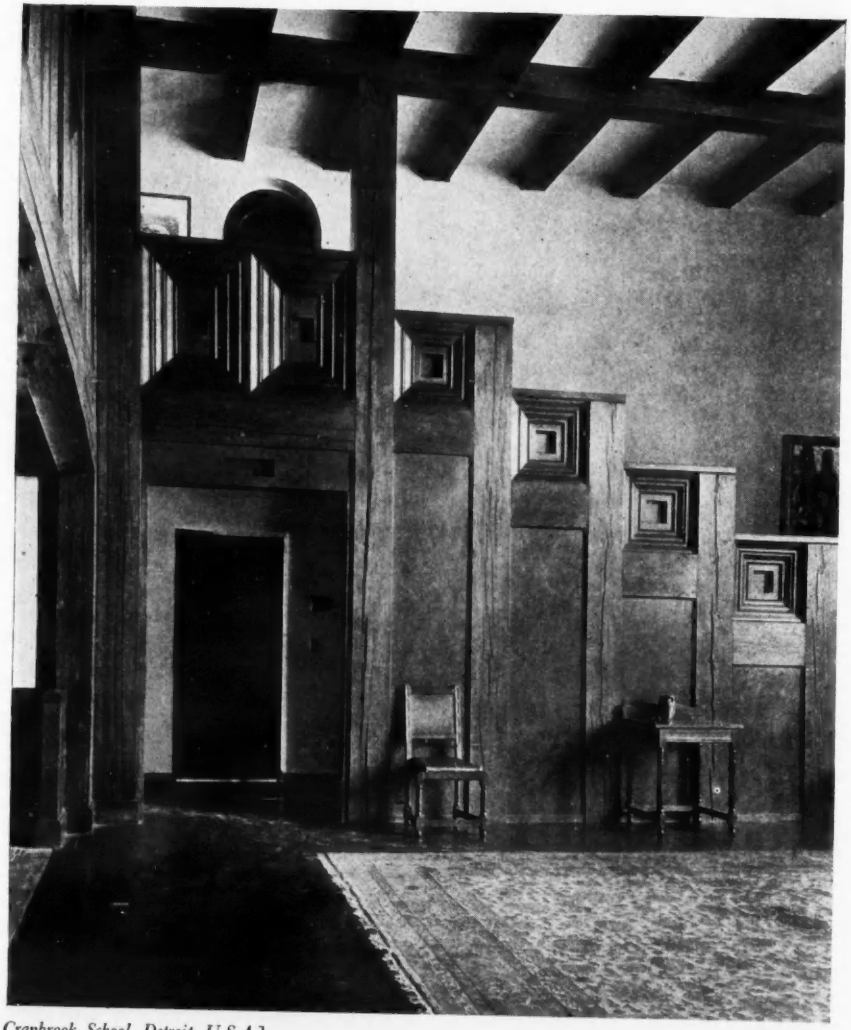
The dining-room has been designed with plain walls, with a wood-panelled dado and a plain barrel-vaulted roof. At one end of the hall are two pylons, carrying banners, placed one on either side of the fireplace. At the other end is the large stone window illustrated on the facing page. The furniture and fittings have been specially designed. An effective decorative feature is made of the piercing of the window-arch soffits.





The rear court, looking towards the academic building and observatory tower, and an interior view of the tower itself. The observatory is a unique feature of the scheme. It has

The rear court, looking towards the academic building and observatory tower, and an interior view of the tower itself. The observatory is a unique feature of the scheme. It has been equipped in the most complete manner, and the tower supports a mounting for a six-inch equatorial telescope. Its other side is illustrated in the view reproduced on page 73. The figure of Diogenes, the centre column, and the arched work in the interior are of sandstone. The walls are stucco, and the ceiling is brick.

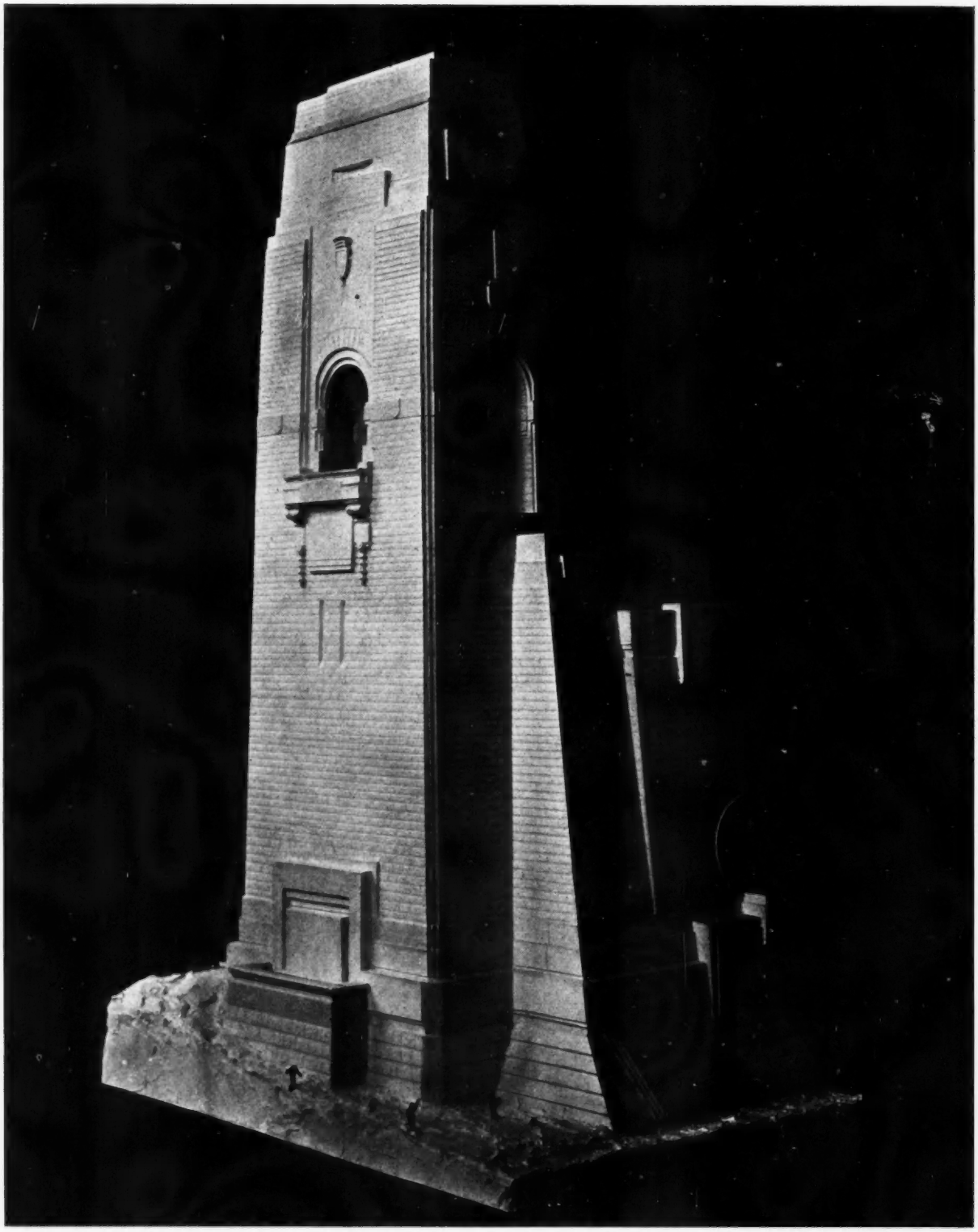




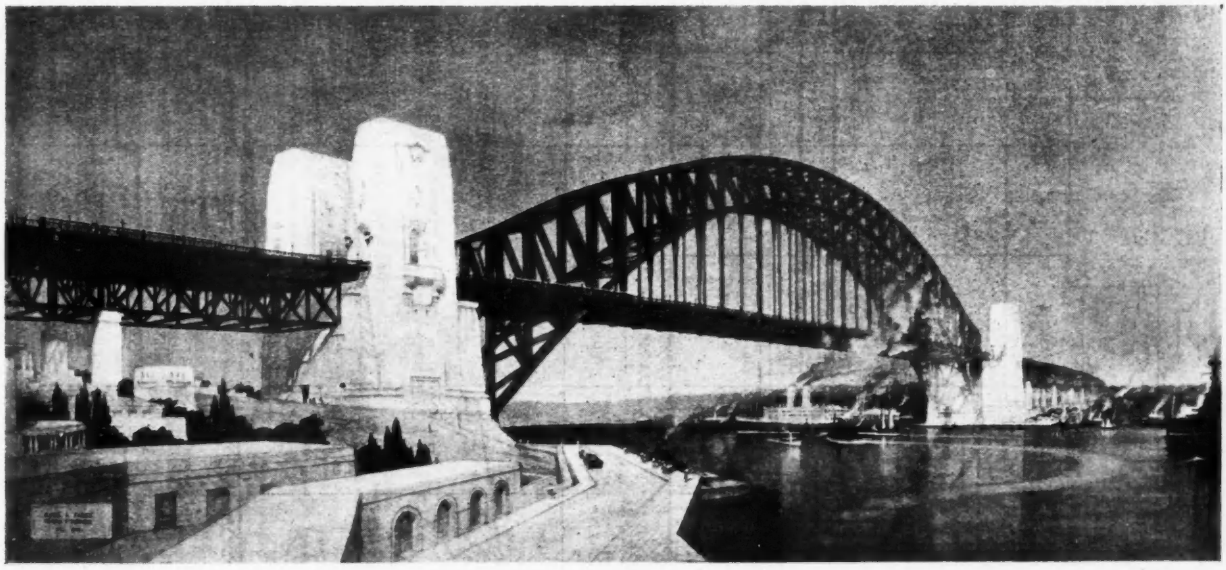
Cranbrook School, Detroit, U.S.A.] [*By Eliel Saarinen.*

In the main stair hall, two views in which are shown, linear motifs have been adopted. They have been used with great originality in the stepped oak balustrading to the staircase, in the balcony, and in the brick and tile surround to the fireplace. The deeply recessed panels, though differing in actual design, are of much the same root idea as some of the exterior detailing, and are a happy expression of diversity in unity. The walls, as well as the ceiling, are of stucco.

SYDNEY HARBOUR BRIDGE: ONE OF THE PYLONS



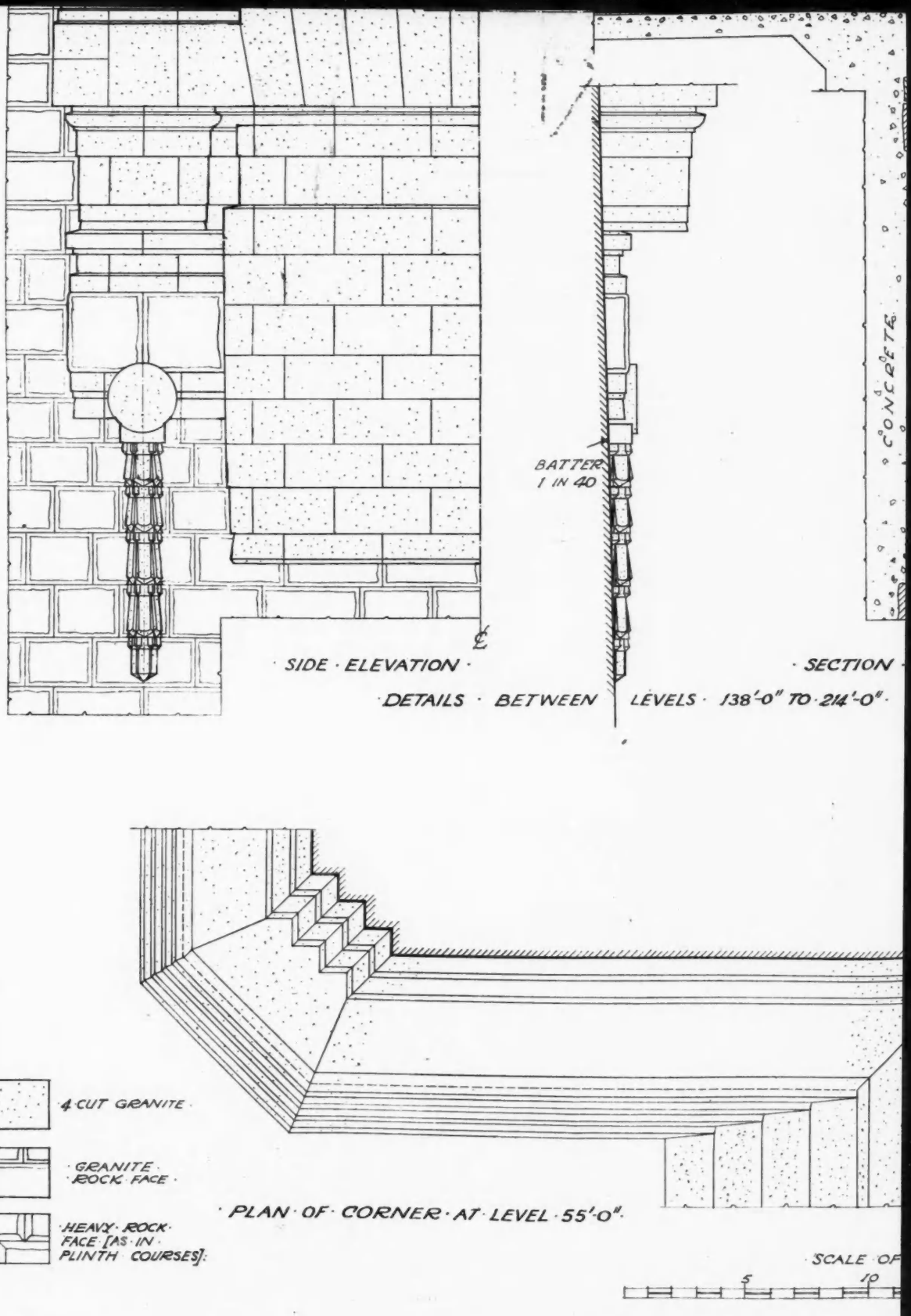
Into the model here photographed, tiny figures of men have been introduced, in order to convey a graphic idea of the scale of the pylons, working drawings of which, devoted to plans, elevations and details of the masonry, are the subject of reproductions in the pages of the special supplement bound in, facing this page.



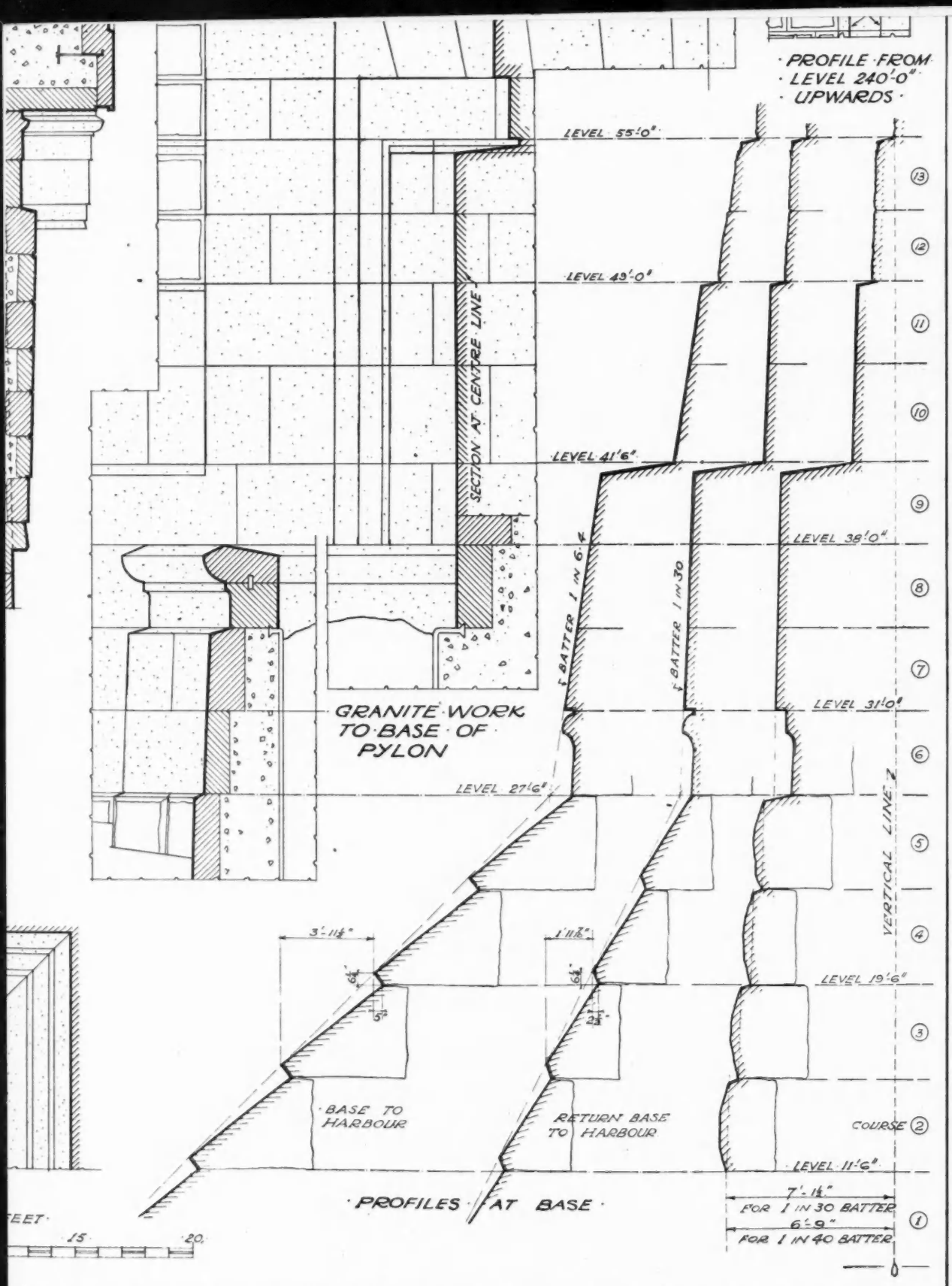
The bridge as it will appear when completed: a reproduction of the perspective drawing, by Cyril A. Farey, made from the drawings of the approved design prepared for the masonry by the architects, Sir John Burnet and Partners

SYDNEY HARBOUR BRIDGE

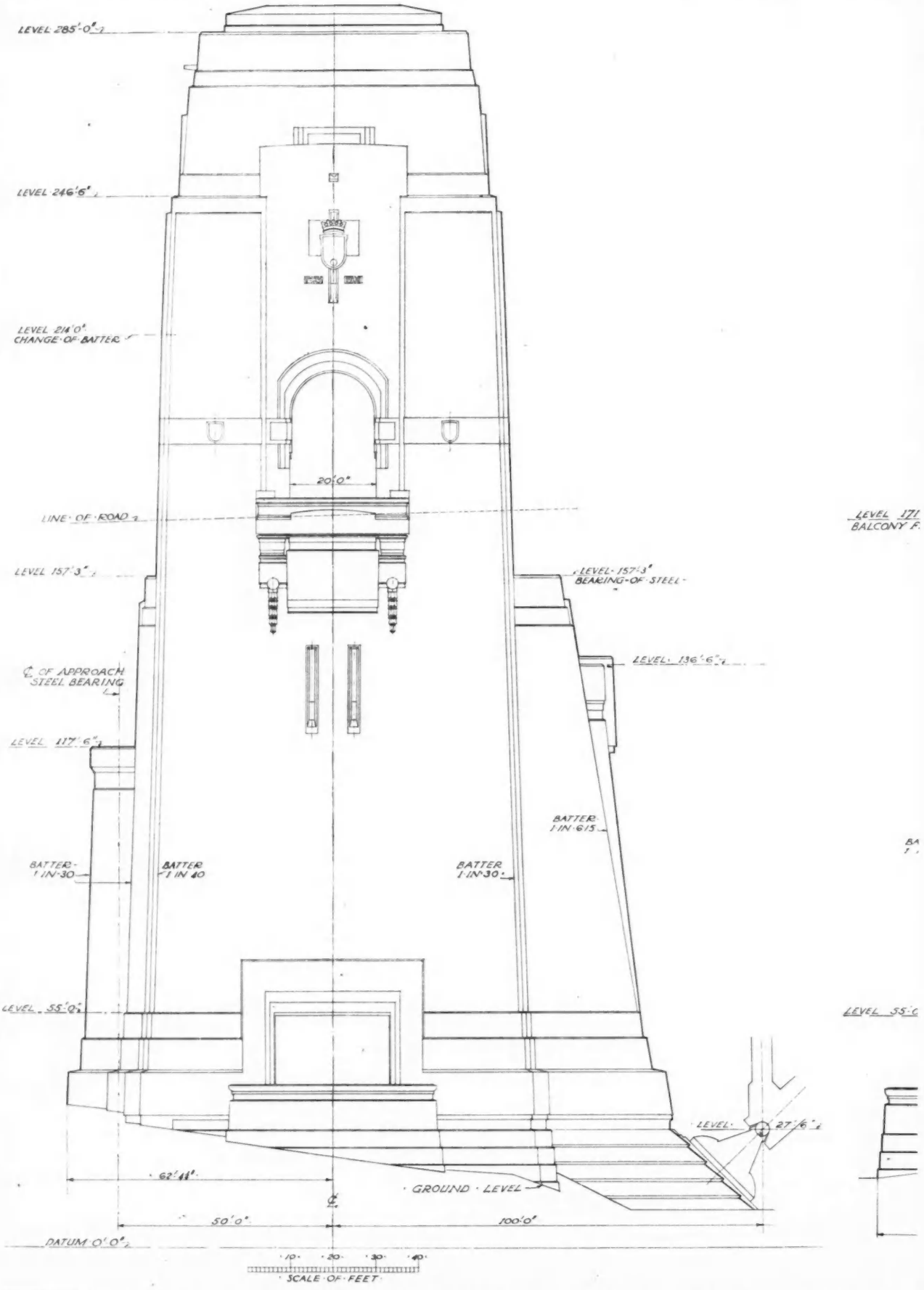
THIS special supplement is devoted to reproductions of working drawings of the masonry pylons of the vast bridge now in course of erection to span the waters of Sydney Harbour, New South Wales, Australia, famous as one of the world's finest natural anchorages. Dr. J. J. C. Bradfield, Chief Engineer, Government of New South Wales; Sir John Burnet and Partners, Architects; Messrs. Dorman, Long and Co., Ltd., Contractors.



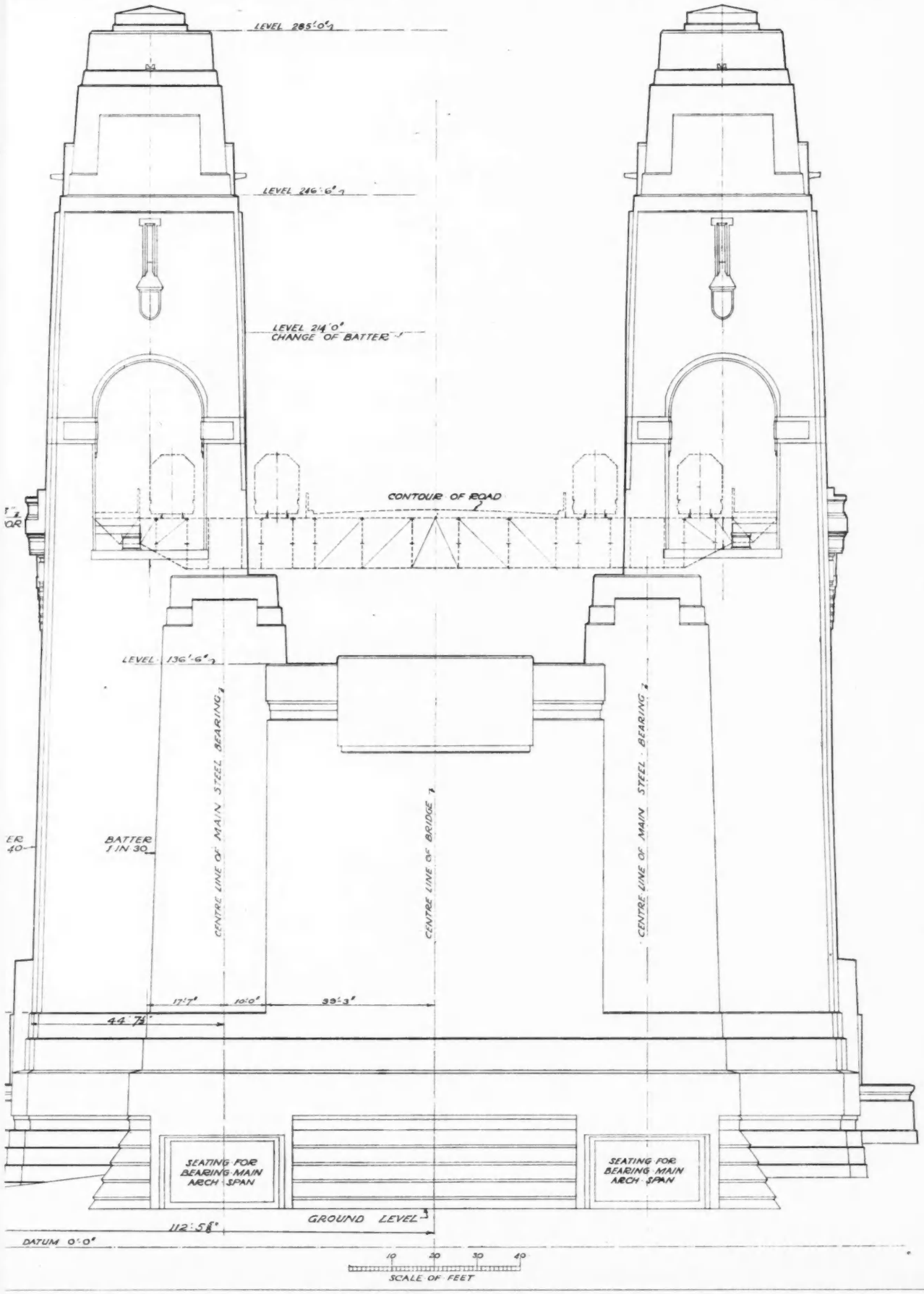
These details of the masonry of the bridge, to a larger scale, should be studied in conjunction with the elevational drawings reproduced
the subway connecting the footways. On the right are



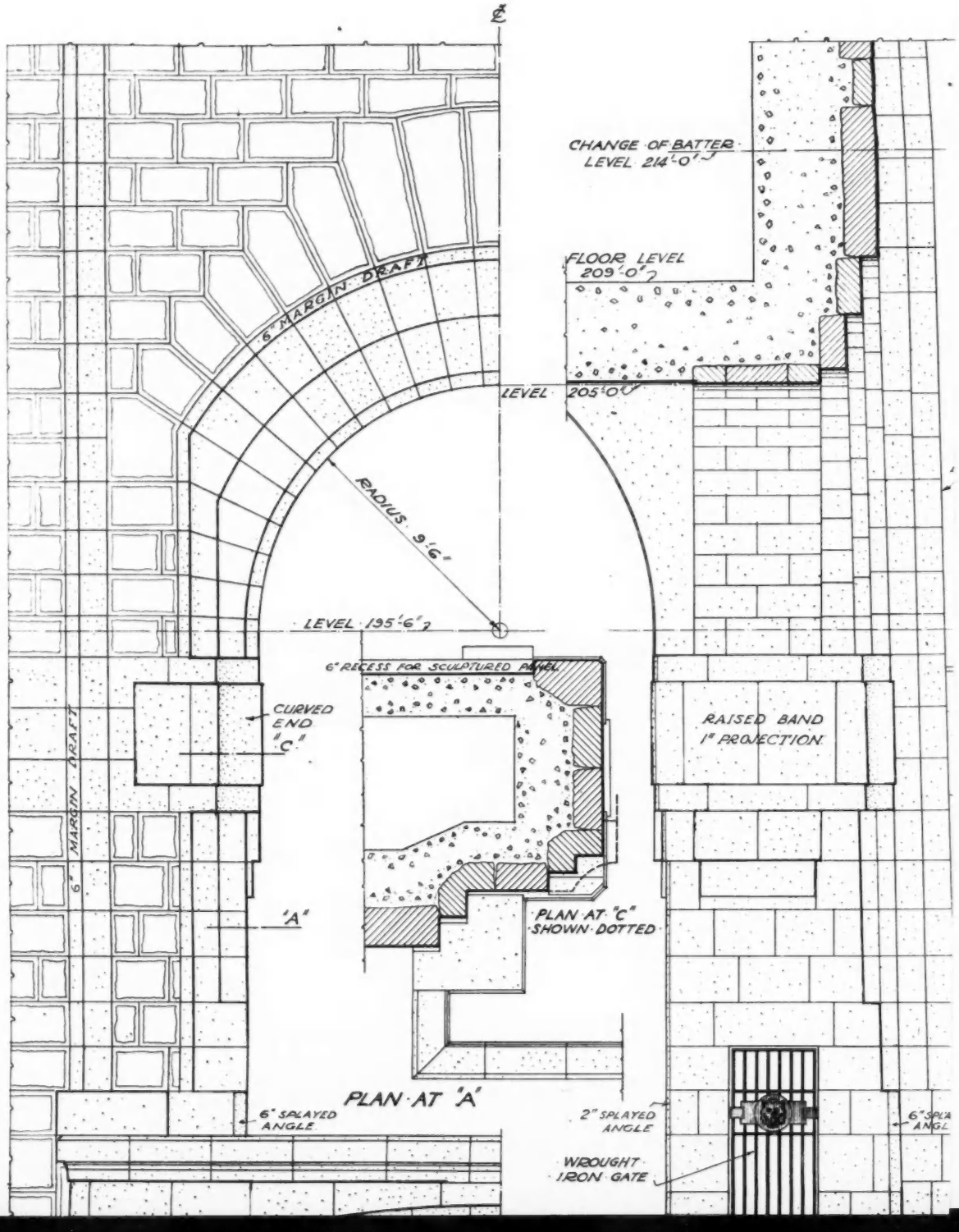
erleaf. On the left are details of the side elevation of a pylon at balcony level, showing one of the wrought-iron gateways leading to etails of the elevations of the pylons on the harbour side.

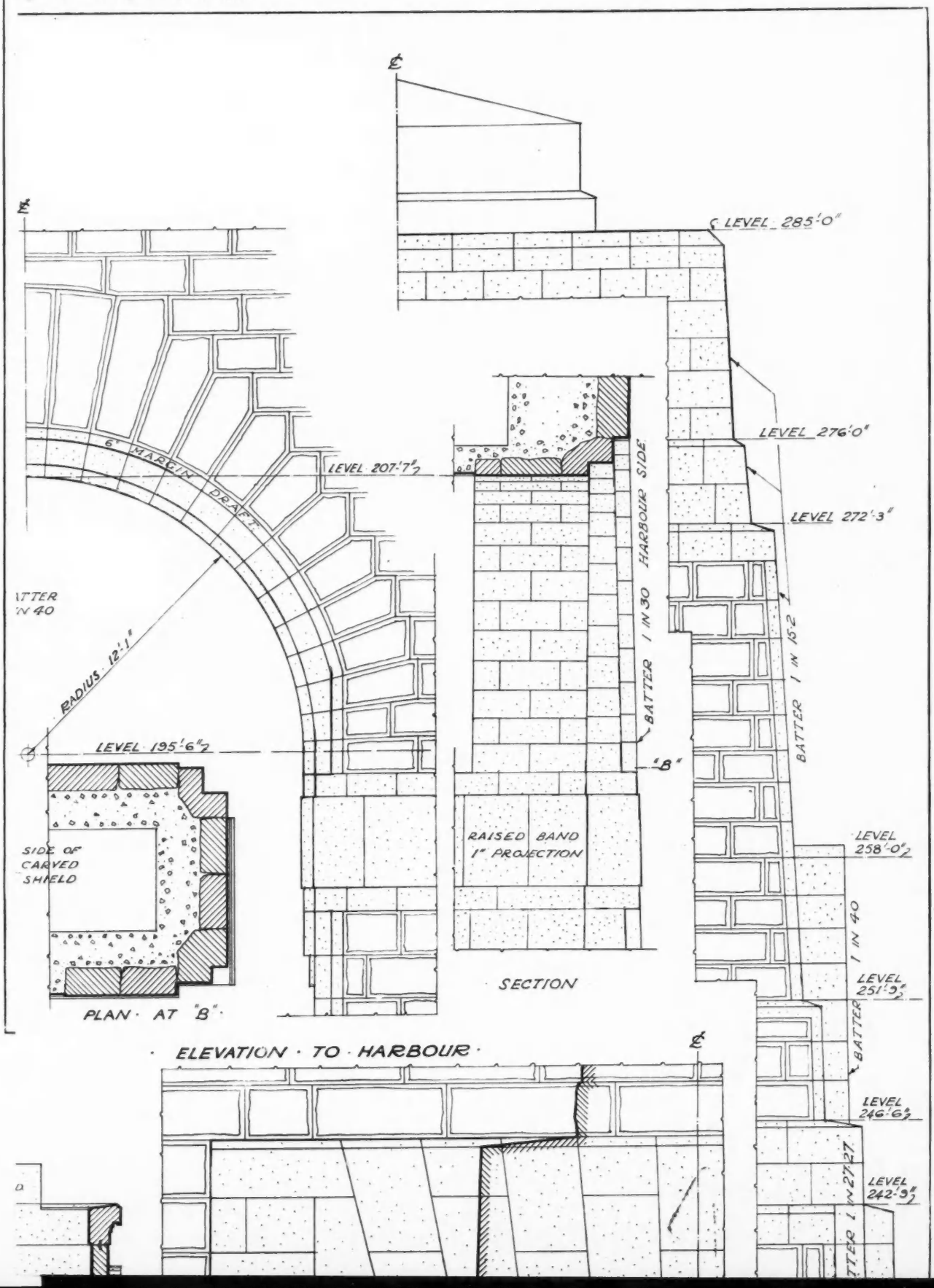


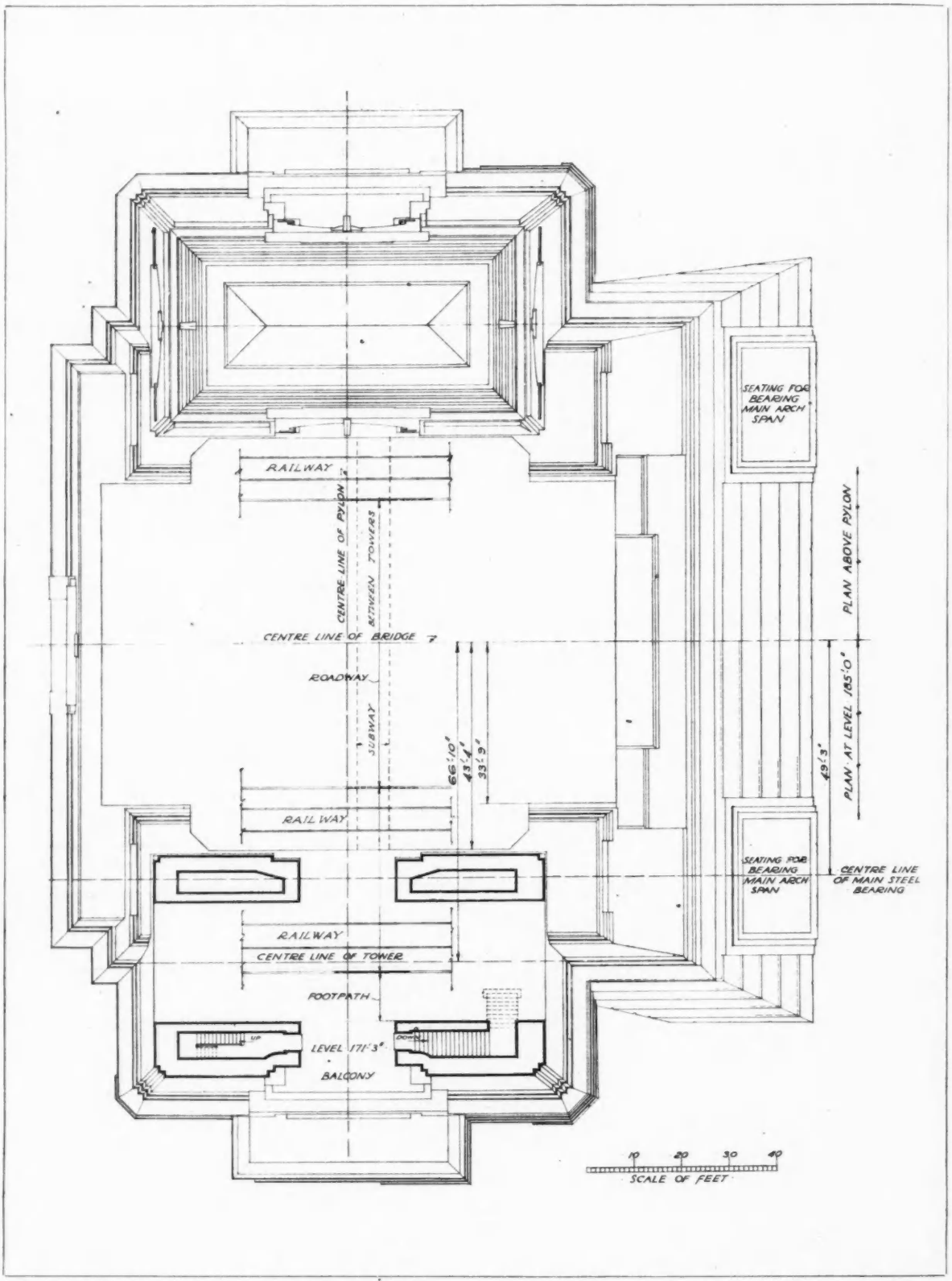
Side elevation of a pylon of the bridge and elevation of tower to harbour. At balcony floor level, about 171 ft. above the water,



bridge supports a central roadway, on either side of which are two railway tracks and a footway. The pylons are 285 ft. high.


℄
CHANGE OF BATTER
LEVEL 214'-0"
FLOOR LEVEL
209'-0"
6" MARGIN DRAFT
LEVEL 205'-0"
RADIUS 9'-6"
LEVEL 195'-6"
6" RECESS FOR SCULPTURED PANEL
CURVED END "C"
6" MARGIN DRAFT
RAISED BAND 1" PROJECTION
"A"
PLAN AT "C" SHOWN DOTTED
PLAN AT "A"
6" SPLAYED ANGLE
2" SPLAYED ANGLE
WROUGHT IRON GATE


℄
℄
℄ LEVEL 285'-0"
LEVEL 276'-0"
LEVEL 272'-3"
6" MARGIN DRAFT
LEVEL 207'-7½
ATTER
N 40
RADIUS 12'-1"
BATTER 1 IN 30 HARBOUR SIDE
BATTER 1 IN 15·2
"B"
LEVEL 195'-6½
SIDE OF CARVED SHIELD
RAISED BAND 1" PROJECTION
LEVEL 258'-0½
1 IN 40
LEVEL 251'-9½
BATTER
LEVEL 246'-6½
LEVEL 242'-3½
PLAN · AT "B"
SECTION
· ELEVATION · TO · HARBOUR ·
℄



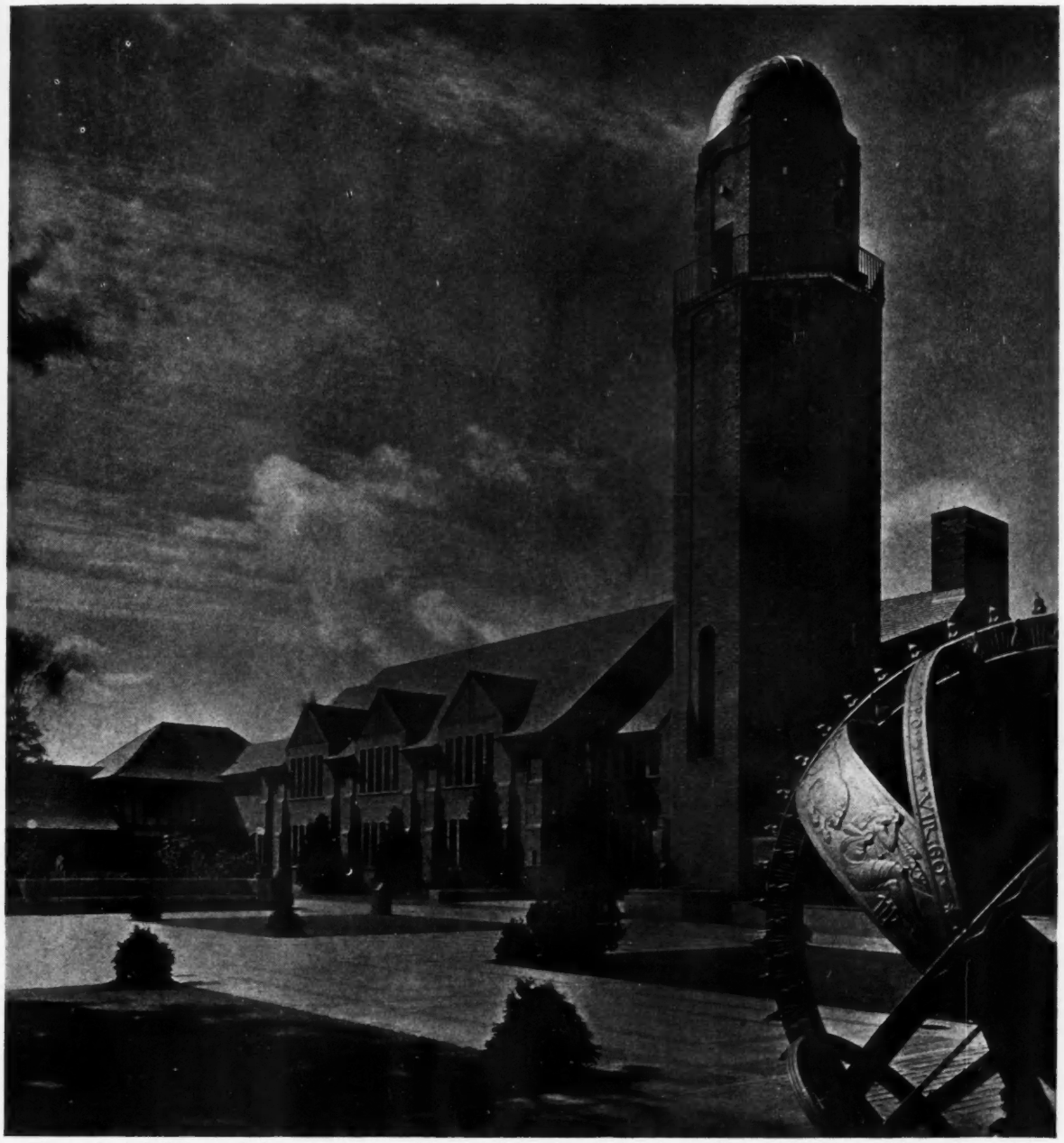
The top half of this drawing shows the plan of the masonry of the bridge above pylon level, and the bottom half at a level of 185 ft., just above the balcony. The roadway is about 68 ft. wide, the total width provided for road and railway traffic being about 134 ft. The footpaths on either side of the bridge are connected by a subway through the towers. This drawing is prepared and reproduced on the same scale as that of the elevations.



CRANBROOK SCHOOL, DETROIT, U.S.A.

A Unique American College Scheme

DESIGNED BY ELIEL SAARINEN

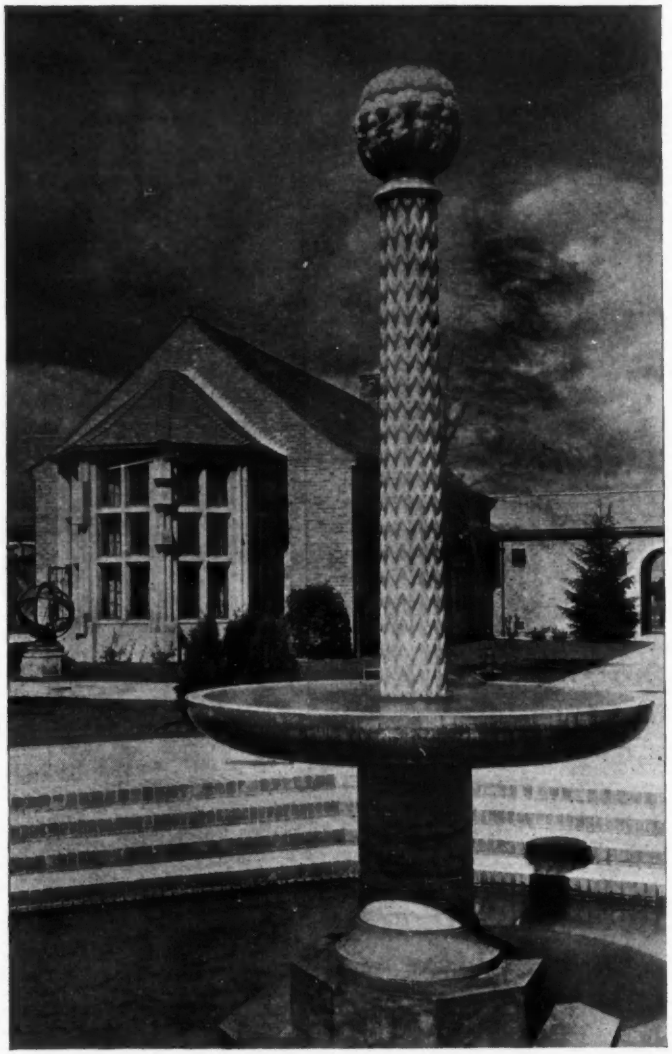


The academic building and observatory tower. The site of the new school is in the Bloomfield Hills, a rolling terrain, with magnificent scenery. In the foreground is an astrolabe of ancient pattern, with the Zodiacal signs, etc.

ELIEL SAARINEN, the Finnish architect, was first recognized in America in 1925, when he secured second place in the competition for the *Chicago Tribune* building. His design was never executed, but it is generally regarded as having had a marked influence upon the appearance of American skyscrapers erected subsequently. Curiously enough, it also paved the way for the early entry of this architect into a sphere more natural to his artistic temperament, for in 1926 he was commissioned to design the Cranbrook School.

This school is now being erected through the munificence of Mr. and Mrs. George G. Booth. The scheme includes separate schools for boys, girls and small children, a school of arts and crafts, and an academy of fine arts.

The buildings at present completed are the main school unit, a gymnasium,





The fountain court and the study hall. The buildings are planned and grouped around a number of flagged courtyards, in a manner entirely different from the conventional American collegiate plan. The ball at the summit of the fountain is carved with a design of pastoral figures alternating with open-mouthed heads of lions, etc., contrasting effectively with the repetitive toothed pattern of the column itself, which is of sandstone. The building behind it is the library.



Cranbrook School, Detroit, U.S.A.]



[*By Eliel Saarinen.*

Two entrances. That on the left is a near view of the entrance to the study hall, shown on the right, above. The door and architrave are of oak, and on either side is a sandstone column, which will support a sculpture. The door panelling itself is of diamond pattern, and on the architrave are boldly carved panels, with a figurehead representing Knowledge. The other doorway leads to the dormitories. It owes a good deal to the modernistic bronze light standard—a pergola, not here illustrated, is somewhat similarly treated—and the coffering above. The steps are of hard-burnt brick.



museum, dining hall, dormitories, an infirmary, faculty residences, and service buildings.

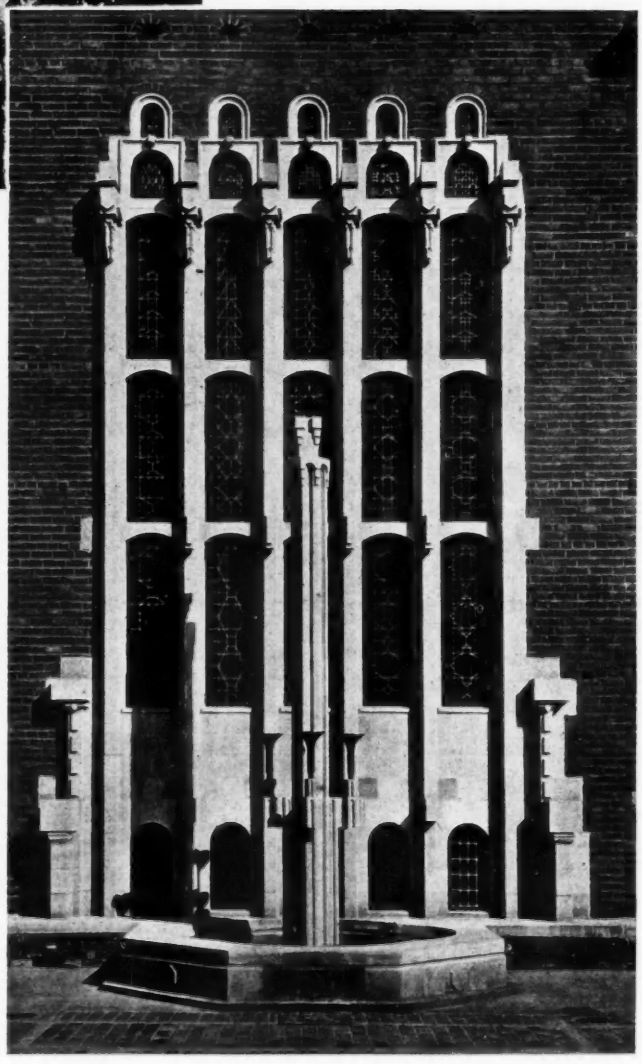
The site of the new school is in the Bloomfield Hills, which are situated about ten miles to the north of the city of Detroit. Here the school authorities possess about seventy-five acres of rolling terrain, with magnificent scenery. The site has unusual attractions. There is, for instance, a delightful valley through which runs a stream broken by islands covered with clusters of willow trees. This part of the site has been converted into a lagoon, and on the main island a rustic cabin has been built for camp-fire celebrations.

In short, the site offered an opportunity that comes rarely enough to any architect for the erection of a fine architectural conception, planned and designed in the grand manner. This opportunity has been grasped and exploited to the full by Saarinen.

In placing the buildings he has abandoned the conventional American collegiate plan. Instead, his buildings are admirably grouped and planned around a number of courtyards. In design and detail they reflect the strong individuality of the architect.

The observatory tower, the entrance to the study hall, the window to the dining hall, and the fountain in the fountain court are among the exterior details already completed that serve to give earnest of his quality. The observatory tower stands at the corner of the academic building. It is of brick, octagonal in shape, with deep circular-headed staircase windows. Above the gallery, surrounded by a railing of simple design, it is set back, and surmounted by a brick cresting and a movable dome. The study-hall entrance is a typical composition of stone, brick and wood. That most of the interior details, as well as those exterior ones mentioned, are of equal interest and character readers may be left to judge from the illustrations.

The structures are built in a yellowish brown tone of brick, among which the darker elements produce a delightful play in colour. Dressings are of sandstone. Much of the layout of gardens, lawns and brick and flag paving has been completed, so that it is possible to judge the buildings in conditions of something like permanence. That judgment can hardly fail to be that Cranbrook School bids fair to be an architectural masterpiece.



The dining hall. All the school buildings are in a yellowish-brown tone of brick, with sandstone dressings. Here and there a single brick is allowed to project to add texture to the surface.

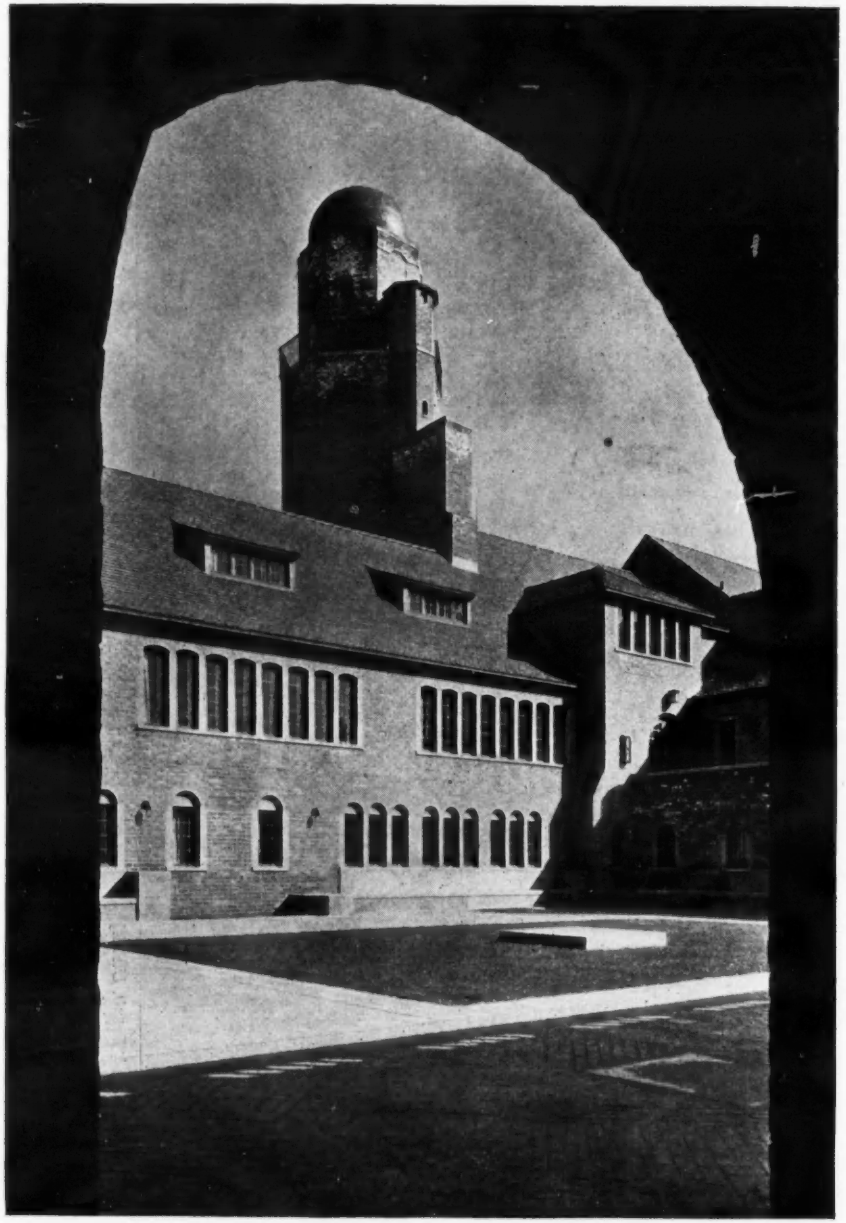
Cranbrook School. By Eliel Saarinen.

A near view of the stone window treatment of the dining hall, illustrated above, with octagonal-based detached fountain. The brickwork repays careful examination.



Cranbrook School, Detroit, U.S.A.] [*By Eliel Saarinen.*

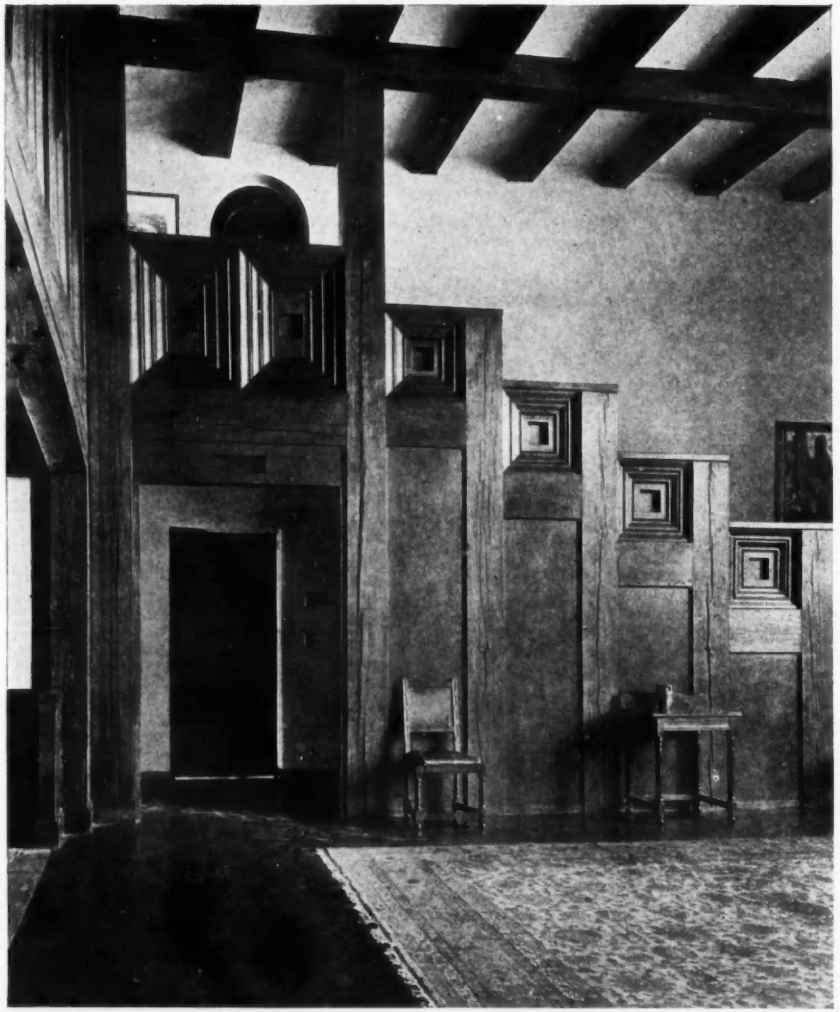
The dining-room has been designed with plain walls, with a wood-panelled dado and a plain barrel-vaulted roof. At one end of the hall are two pylons, carrying banners, placed one on either side of the fireplace. At the other end is the large stone window illustrated on the facing page. The furniture and fittings have been specially designed. An effective decorative feature is made of the piercing of the window-arch soffits.





The rear court, looking towards the academic building and observatory tower, and an interior view of the tower itself. The observatory is a unique feature of the scheme. It has

The rear court, looking towards the academic building and observatory tower, and an interior view of the tower itself. The observatory is a unique feature of the scheme. It has been equipped in the most complete manner, and the tower supports a mounting for a six-inch equatorial telescope. Its other side is illustrated in the view reproduced on page 73. The figure of Diogenes, the centre column, and the arched work in the interior are of sandstone. The walls are stucco, and the ceiling is brick.

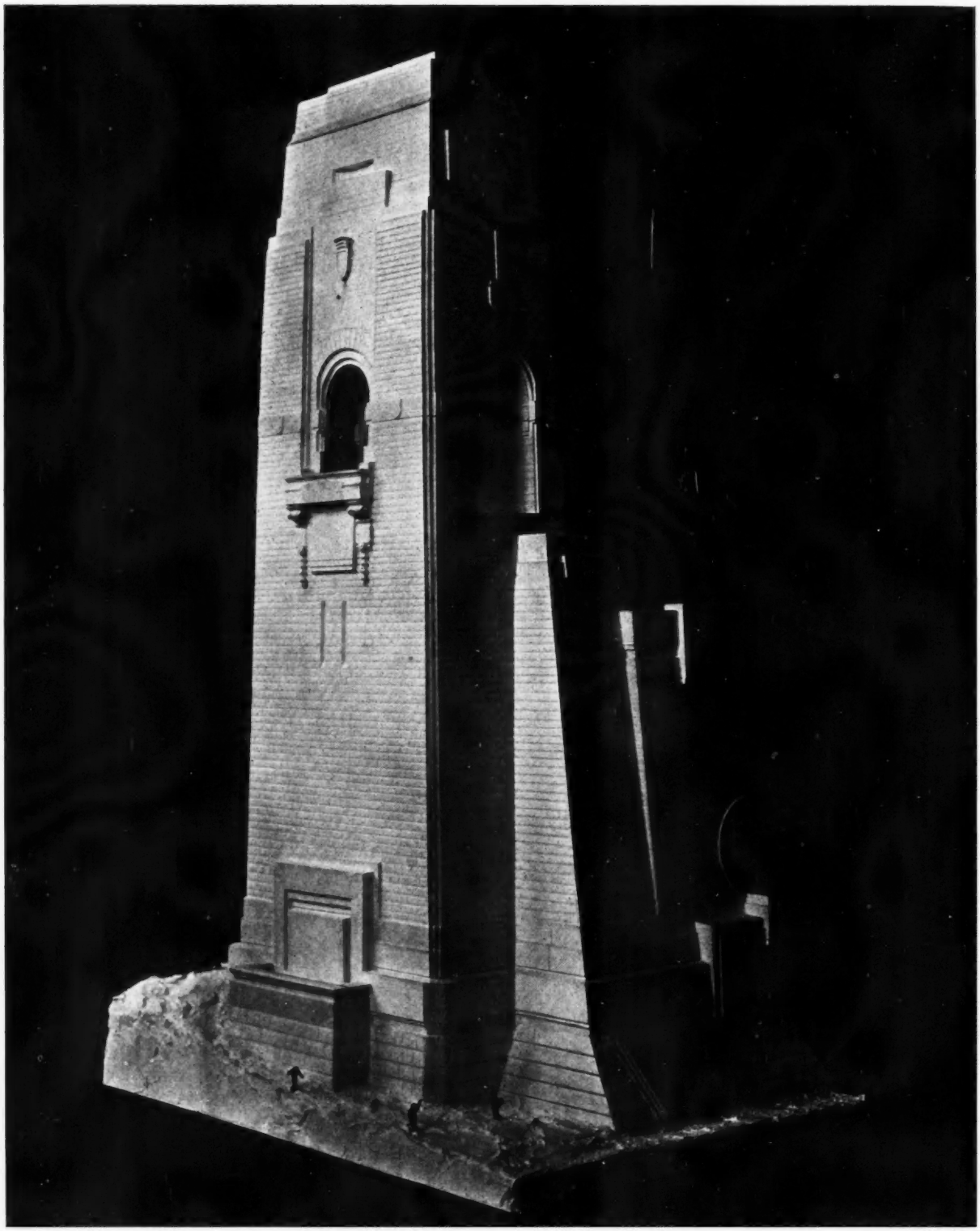




Cranbrook School, Detroit, U.S.A.] *[By Eliel Saarinen.*

In the main stair hall, two views in which are shown, linear motifs have been adopted. They have been used with great originality in the stepped oak balustrading to the staircase, in the balcony, and in the brick and tile surround to the fireplace. The deeply recessed panels, though differing in actual design, are of much the same root idea as some of the exterior detailing, and are a happy expression of diversity in unity. The walls, as well as the ceiling, are of stucco.

SYDNEY HARBOUR BRIDGE: ONE OF THE PYLONS



Into the model here photographed, tiny figures of men have been introduced, in order to convey a graphic idea of the scale of the pylons, working drawings of which, devoted to plans, elevations and details of the masonry, are the subject of reproductions in the pages of the special supplement bound in, facing this page.



VIEW FROM THE TERRACE OF OLD SOMERSET HOUSE, LONDON

From the painting by Paul Sandby, R.A., in the Victoria and Albert Museum, reproduced here by permission of the Museum authorities, and by courtesy of The Connoisseur.

(See the Book Review pages in this issue.)



The east or garden side of the house, as it is today. To the left is seen the end of the stable block, and a glimpse of the arcaded return wing of the new outbuildings which have been placed to enclose the courtyard.

SHEPHERD'S HILL, BUXTED, SUSSEX

The Home of Mr. Edward Maufe

Below, one architect discourses, with professional appreciation, about another architect's fortunate find, and what he has done with it. He has made what was a farm dwelling-cum-dairy, with some fine features but not a single window on its sunny side, into a country house full of sunshine and quiet dignity.



As it was, the house had no windows at all on the south side, its sole feature being a rain-water pipe sloping right across it. Six windows have been formed here, while the fenestration of the east side has been revised, and its lean-to converted into a balcony, as shown in the upper view.

DESCRIBED BY H. AUSTEN HALL

MOST of us have, at some time in our lives, looked over an attractive gate and wished the house on the other side were ours. "I wonder if it is for sale?" and for no reason at all we usually answer our own question ourselves and go sadly upon our way.

But fortunately there are some people in whom wisdom does not linger, and when Mr. Maufe looked over his (future) gate upon the noble stable of Shepherd's Hill he decided upon instant action. Strangely enough, the house was for sale, and was promptly sold to him. Thereupon he entered upon one of the happiest experiences that can fall to an architect's lot, that of making a lovely old bit of brickwork into a house and a home for himself.

The early history of Shepherd's Hill is difficult to discover, but rumour says that a gipsy settled on this hill and became something of a shepherd king. The interesting ancient enclosure, with its deep moat all round its four square sides, which still exist in the valley, gives colour to this story. Later tradition says a great house was built, but that this was burnt down and that the existing house is only a wing of it. However, in 1740 Sir Robert Fagg, the third baronet of Wiston, built the fine stable block and used Shepherd's Hill as a hunting-box, driving over from Wiston in his coach-and-four, the coach being housed in the central arched portion, the wings stabling as many as sixteen horses.

The land is partly in the parish of Hadlow Down and partly in Buxted, famed for having produced in 1543 the first English metal cannon. Iron cannon balls were recently found at Shepherd's Hill itself when making garden terraces.

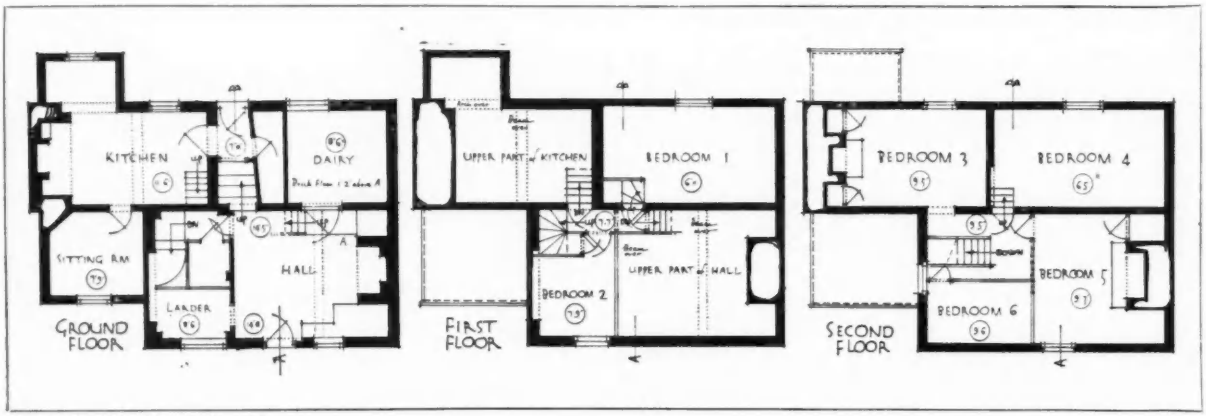
The buildings consisted in 1926 of a small farmhouse in a bad state of repair, and very large stables and outhouses in which lay the real attraction for the architect. It was obvious to him that an approach through the great archway, where the coach used to stand, would be something of a thrill to be experienced whenever he came home. Something is added to one's daily life if a fine gateway becomes an intimate part of it. To develop its intrinsic dignity was not a difficult thing to do. Mr. Maufe has widened the gap between the low outbuildings that flank the main approach from the road, and made the arrangement

[*Continued on page 86*





Two views of the dining-room. That on the right shows the new south window, giving a view to the Downs. On either side of it shell alcoves have been formed in the splayed walls, lit by concealed electric lamps. Upon the specially designed writing cabinet stands a sculpture by Eric Gill. At the north end of this room are the steps, leading down from the kitchen doorway, seen in the other picture, which is taken through the folding-door opening of The Room, looking towards the garden door. The brick walls are whitewashed, the floor tiles are pale biscuit, and the curtains chalk-blue.

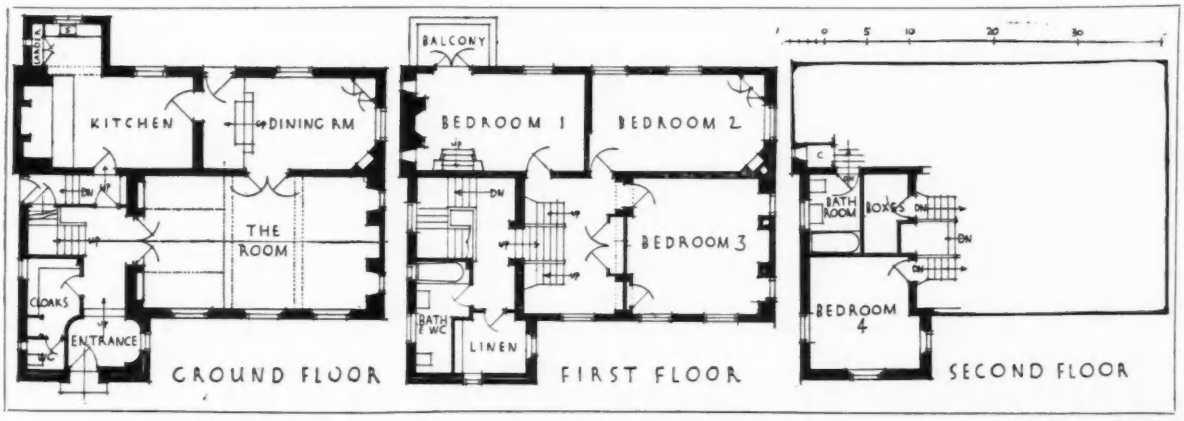


Shepherd's Hill, Buxted, Sussex.]

Plans of three floors of the house before alteration. It will be noted that the kitchen and the hall extended through two floors. The figures in circles show the original heights of the rooms.

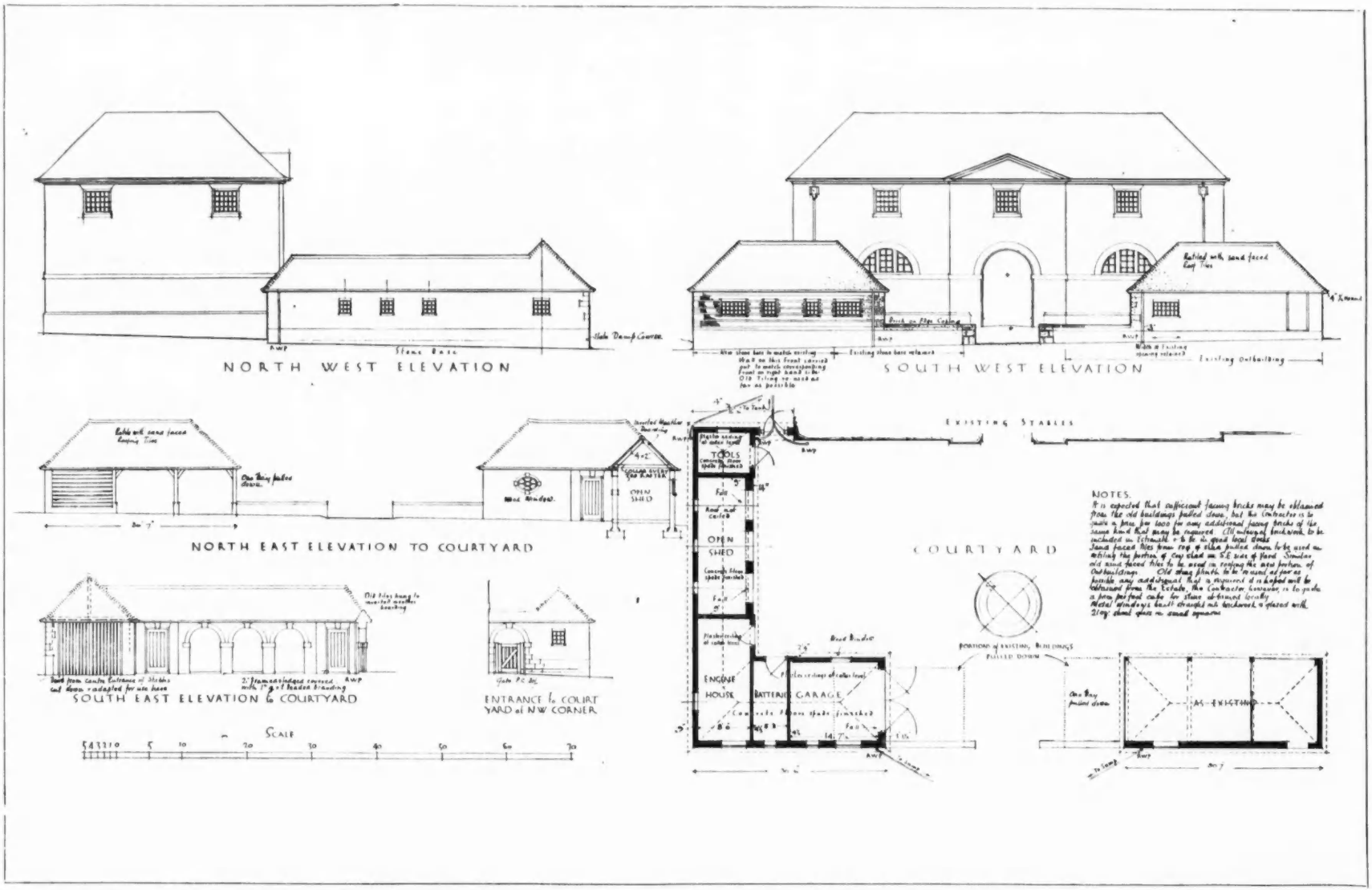


The Room, looking south, towards the new windows and the stone fireplace, the capacious hearth of which is adapted for a fire of logs, and showing the folding doors to the dining-room on the left. The old ceiling beam in the original hall has been preserved. The walls have been left with a roughish plaster texture, and, with the ceiling, are distempered grey-cream, while beige velvet curtains have been hung—a subtle contrast with the rather warm tone of the wide oak floor-boards. The table on the right is to the architect's design, made in English walnut, with a Swedish green top.

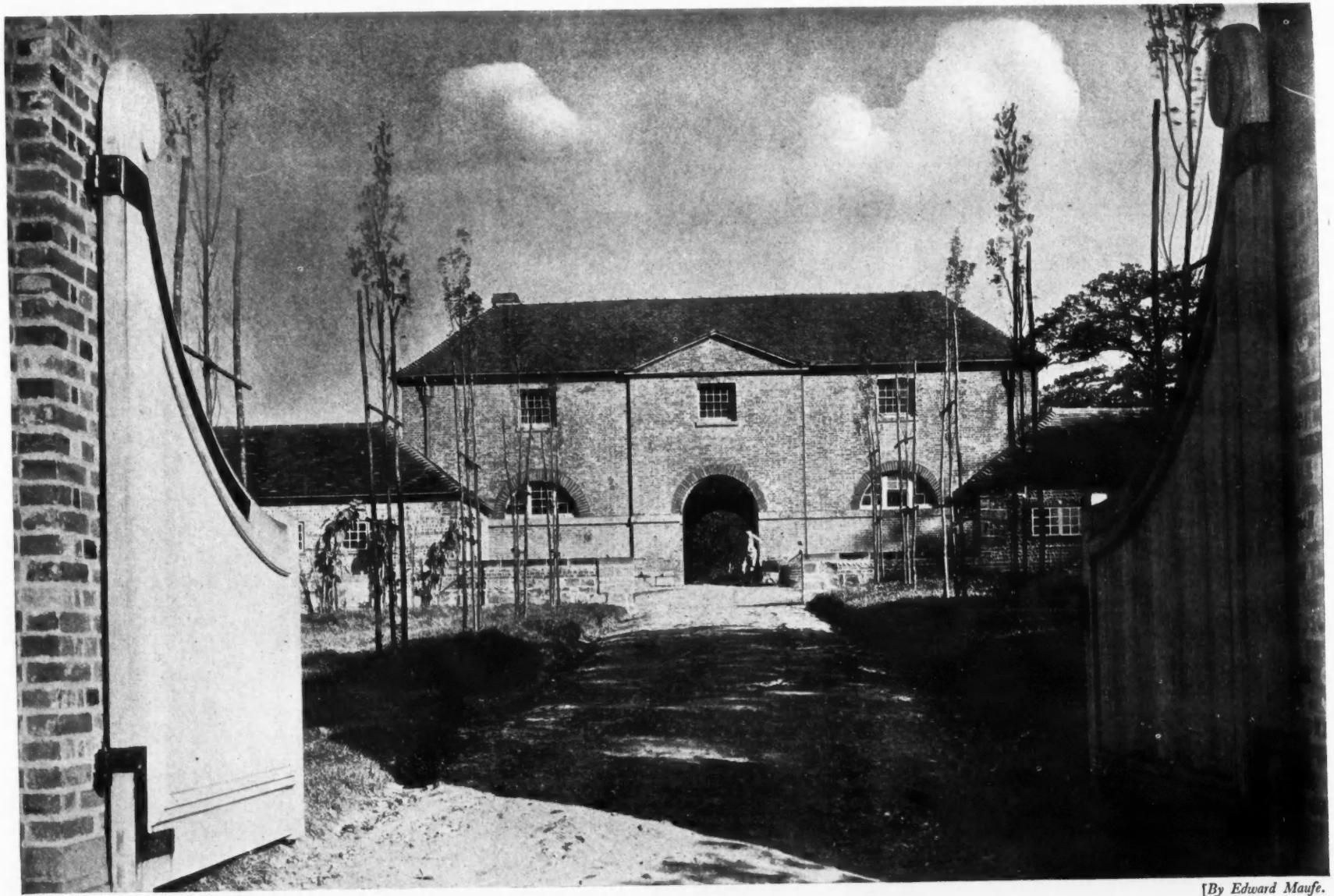


[*By Edward Maufe.*

In the reconstruction, the adjustment of the numerous floor levels has been a matter of nice calculation. In effect, two floors are given, instead of three, and many of the rooms gain in loftiness.



These drawings, by the architect, show elevations of both existing and new work in the stable block and courtyard, and, in black, plans of the new outbuildings. The central archway seen in the south-west elevation runs clear through the building, which was built in 1740 of fine red brickwork, since paled with lichen, and has a stone cornice and plinth.



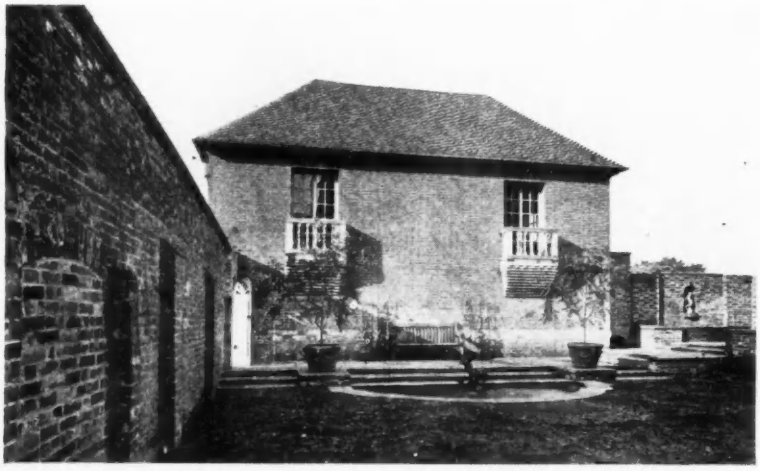
[By Edward Maufe.

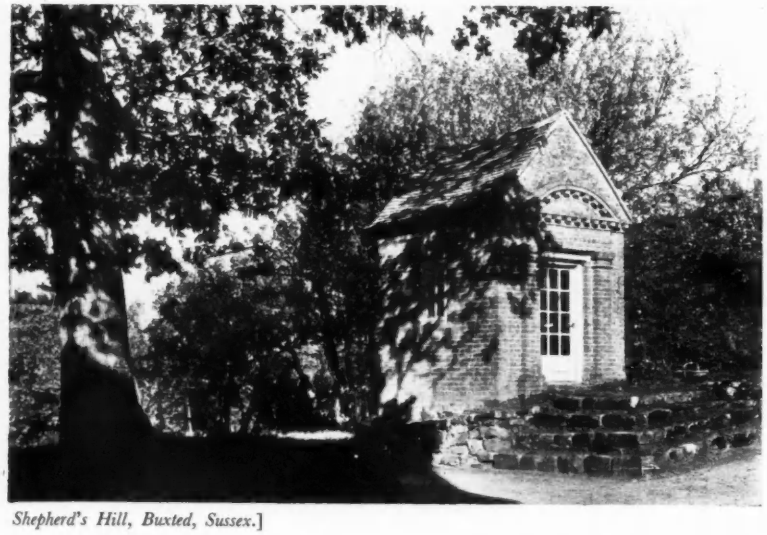
Shepherd's Hill, Buxted, Sussex.]

A general view of the stable block and courtyard, from the south-west. This is the chief entrance from the road, and has been emphasized by brick piers carrying a pair of specially-designed oak gates, which are unpainted and show darker than the photograph suggests. The stable itself remains as it was, but the garage on the left is new.



A new avenue, bordered by poplars, leads to the stable block. By comparison with the small view below, of the building in its old state, it will be seen that one bay of the outbuilding on the right has been cut off, while that on the left has been pulled down in favour of new work, re-positioned, to give a balanced design. On the extreme left is the oast-house ; the house lies to the right.





Shepherd's Hill, Buxted, Sussex.]

The new sunk walled garden, with its terrace and pool, seen in the upper of these views, has been formed between house and stables, where once were pigsties. The lower shows the charming brick building, dating from 1740, that was Sir Robert Fagg's privy—a two-seater—and is now used as a garden house.



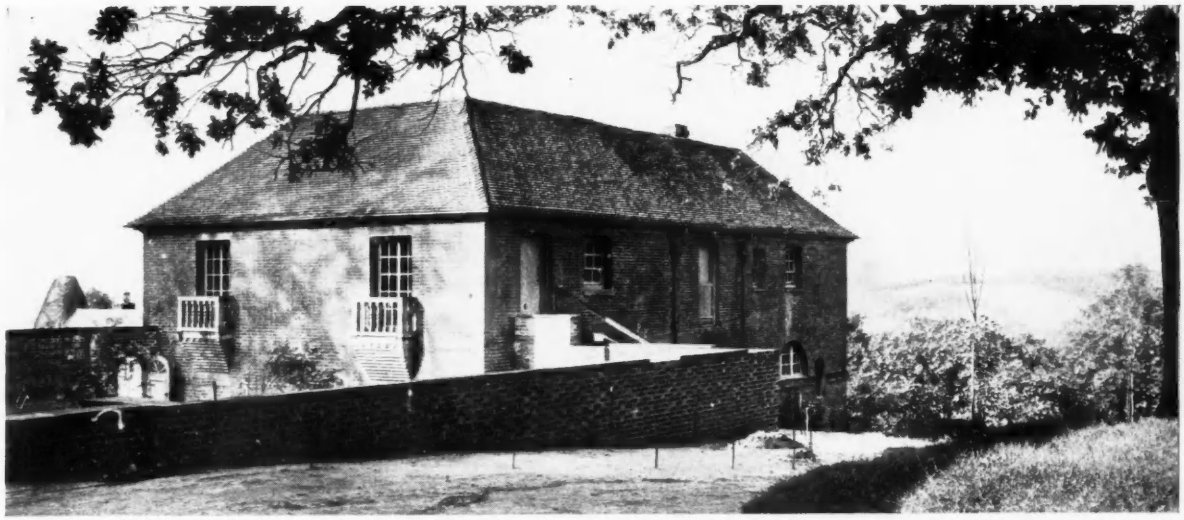
The stables before alteration. The right outbuilding is of flint with brick bands ; the left one, asymmetrically placed, later, had poor brickwork.

symmetrical with an interesting wall of flint and brick. The effect is completed with a new drive running between Lombardy poplars and approached through a new gateway with very tall brick piers which carry gates of unusual and interesting design.

Within the space contained by the outbuildings and the old stables is a small courtyard, with garage, a room for the lighting plant, and other useful outhouses.

It is quite evident that what remained of the house itself in 1926 was in no way worthy of this stable building, the only other obvious remains of the Fagg occupation being the fine brick privy, now a garden house, and certain definite plantings of yews and Spanish chestnuts.

In dealing with the stables, all that was necessary was to get the approach right. The house was a very different thing, and it certainly required more than average imagination to see what Mr. Maufe has seen in it—an odd little house, without any definite shape about it, and with windows that came and went in an unusual degree of uncertainty, indicative of the strange floor-levels within. But it has good brickwork and a tile roof. These elements of colour in splendid



This shows the same garden end of the stable block that is seen in the view on the facing page, but gives, in addition, some indication of the lie of the land and, on the left, a hint of the oast-house. The balconies are, of course, new ; and the down pipes have been redisposed. To reach the house from the entrance gates, one drives right through the stable archway, turns right, and so up the slope seen.

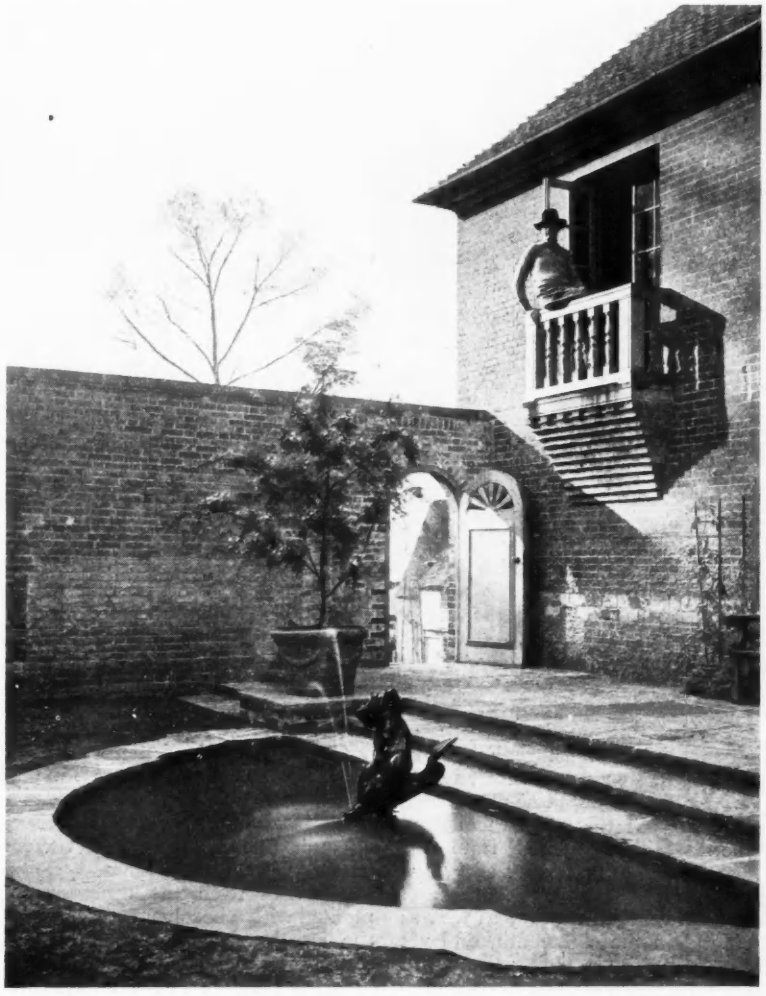


Under the old dispensation, pigsties, shown in the foreground, used to occupy an intermediate position between the stables and the dwelling house.

surroundings are in themselves so stimulating that any artist would be content with such a beginning.

Mr. Maufe wisely rebuilt the lower portions on the north side, and put his entrance and staircase here, with the sanitary work. This left the old part available for the living-rooms on the south side. By a stroke of genius he removed one floor entirely, thereby obtaining a living-room thirteen feet high, with new long sash windows overlooking the formal garden.

The staircase is placed on the axis of this large room, which is entered through folding doors. All this blending of the old and new in the plan has been most skilfully done, and a balanced and dignified relation is maintained between the staircase and the room. The effect is one of pleasant surprise, a quality with which all good design should be invested, but which is too rarely found. This living-room is the feature of the house, and is decorated with a degree of comfort and elegance that suggests the Great Room rather than the parlour—an architect's room essentially, with plenty of light and colour, in which modern furniture and decoration seem fit and inevitable. People with less knowledge would have preserved an eighteenth-century



[*By Edward Maufe.*

A corner of the sunk garden, showing, through the new doorway cut in the old wall, the oast-house hard by the main gates. The pool, which can be lit by a submerged light at night, has a bronze dolphin-and-mermaid fountain by Carl Milles. The variation in the balcony profiles was accidental. (*See page 37 of this issue.*)





Shepherd's Hill, Buxted, Sussex.] [*By Edward Maufe.*

Opposite ends of the best bedroom. The steps on the left lead up to a bathroom. The curtains are oyster blue, the ceiling is pink, and the carpet grey. The recessed bed-head wall is finished in silver-leaf. Herein are fitted cupboards and bookcases, while in either jamb is a flush ground glass lighting panel, behind which are "sunshine" and ordinary electric bulbs.

character in all these accessories, but here we have life and light and line that are full of freshness combined with mature experience; a creation, not an echo.

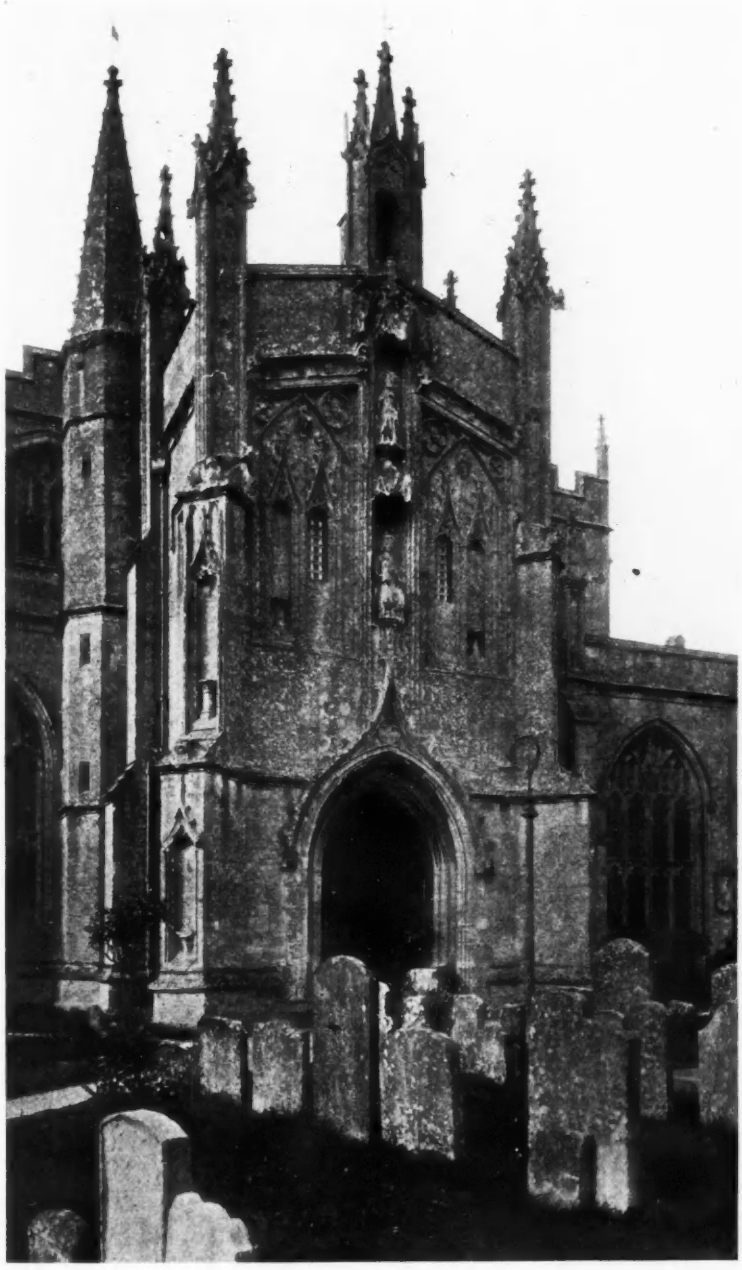
The dining-room leads from the large room, and is pleasantly furnished with fixed shelving and cupboards at one end, and a raised dais at the other, giving access to the garden. The floor is in large yellow tiles. Here again the modern furniture gives a restful note, at once satisfying and inevitable —even that fine modern piece of sculpture seen in the picture, Eric Gill's "Head-dress," being completely at home. No one seeing these rooms now would want old things in them, and Shepherd's Hill is spared from the antique touch. The beauty of a good house is that it carries the graces of life in the twentieth century as well as ever it did in the eighteenth, and yet most of us persist in giving the "past period" accent to our rooms, regardless of plus-fours and dinner-jackets. By all means let us express a period, but while we dress as we do it will be this and not some other period that is expressed.

The immediate surroundings of the house are formal, with pleasant stone terraces and herbaceous borders. A feature is made of the space between the house and stables on the west side, where a sunk garden is formed, taking advantage of the natural levels. A delightful half-circular pool makes a setting for the dolphin and mermaid of Carl Milles. Overlooking the pool two balconied windows have been made in the side of the stable block, with attractive corbellings and oak balustrading. By flood-lighting the fountain and stable wall an interesting effect is obtained at night from the windows of the large room.

The vista from the dining-room is planted with a beech avenue continuing the old beech grove, and in this a statue is to be a feature. At present a stump does duty for the statue, but it gives a good idea of the size and placing that is desirable.

Planning and nurture of the gardens and lands is, indeed, what alone can prolong the savour of such an adventure. All is too briefly done, where building is concerned. The hand of Time may mellow bricks and mortar, but his touches are slow and imperceptible. A garden is a living thing, which grows under the eyes from year to year. Much planting of trees has already been done, but there is always more to do. And in the Book of the Trees of the domain is written the date and pedigree of every addition—a valuable record.

In Shepherd's Hill the old and the new are blended with complete success, and it is a good example of constructive propaganda in this particular countryside, carried out by a member of the Council for the Preservation of Rural England. Not only has the old been preserved from decay, but a new dignity has been added to it. The result is a work of art, and far more than this—a home, the work of two minds that know of no impediments.



ENGLISH PRECEDENT No. 97

SOUTH PORCH, NORTHLEACH CHURCH, GLOUCESTERSHIRE

This Church of SS. Peter and Paul was rebuilt about the middle of the fifteenth century at the cost of John Fortey, a wool merchant.

The fine porch of two bays, which escaped serious injury by the Puritans, has an elaborate groined roof and arcaded walls. Over the entrance are two large canopied niches with statues, the upper one representing the Holy Trinity and the lower one the Blessed Virgin and Child.

On either side of the lower niche is a window to the chamber over the porch, which is reached by the octagonal staircase with a crocketed spirelet.

LUXURY FLATS IN LONDON

Modern Tendencies in Four Examples



Stratton House occupies an historical site in Mayfair, and commands unobstructed views of the Green Park. Those towards the south include Buckingham Palace, the Houses of Parliament and the old-world buildings bordering the Park, while towards the north, on clear days, may be discerned the distant heights of London.

STRATTON HOUSE, PICCADILLY, W.

By W. Curtis Green

THE building of flats, especially "North of the Park," is now so prolific that the public may well ask who in the world is going to live there, and how can they afford the rents? The answer is that no clear statements of the cost of living in a house, with its upkeep, rates and taxes, servants and services, have been circulated by book or journal to the public, but they, as individual families, are finding out the cost for themselves. Having done so, these families take a flat without being told to, and if the budget is miscalculated by them they console themselves: less time involved in that all-embracing state, "house-keeping," less moneys involved in service.

By service is meant not only the engaging and retaining of servants, but also that troublesome thing, the family boiler, for the provision of hot water and central heating. That there are enterprising syndicates and companies who



The main entrance hall, looking south. At the end are two lifts. On the left are the entrance and vestibule from Stratton Street, and on the right, beside the lifts, is the staircase.

STRATTON HOUSE, PICCADILLY
By W. Curtis Green

The north corner of the main entrance hall. To the right are the staircase and lifts.



know this little truth is obvious; that all these syndicates and companies will succeed in their various enterprises is less obvious. That their chance of success is dependent on a competent architect to design their buildings will become increasingly certain as the market slumps. Production of the more expensive type of flat is already somewhat ahead of demand.

To the architectural profession it must be somewhat astonishing that so much capital can be confidently sunk in the erection of such permanently constructed buildings, for it must be

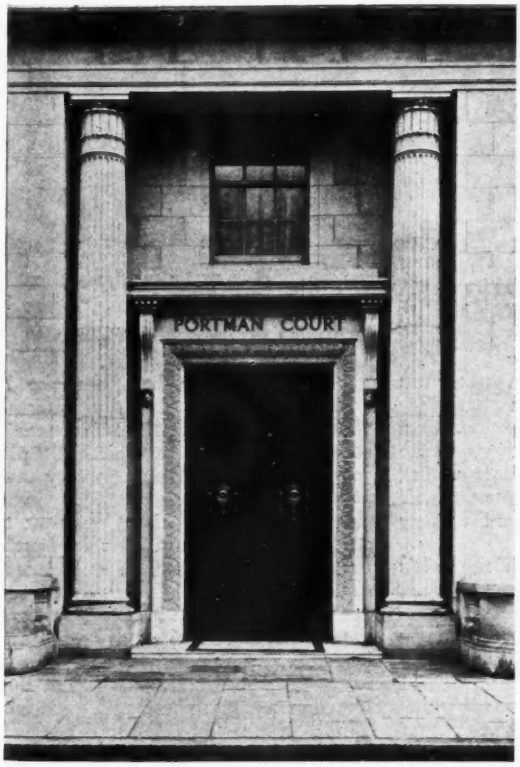


Orchard Court occupies the whole of the east side of Portman Square ; and Portman Court, illustrated on the facing page, part of the same rebuilding scheme, a considerable portion of the south side. Orchard Court will be ready for occupation in March next.

ORCHARD COURT, PORTMAN SQ., W.
By Messrs. Joseph



Portman Court, like Orchard Court, is faced in Portland stone and multicoloured bricks. It will be noted that both these buildings have zoned roof stories instead of the more prevalent mansard roof. A limited number of garages are provided for tenants' cars.

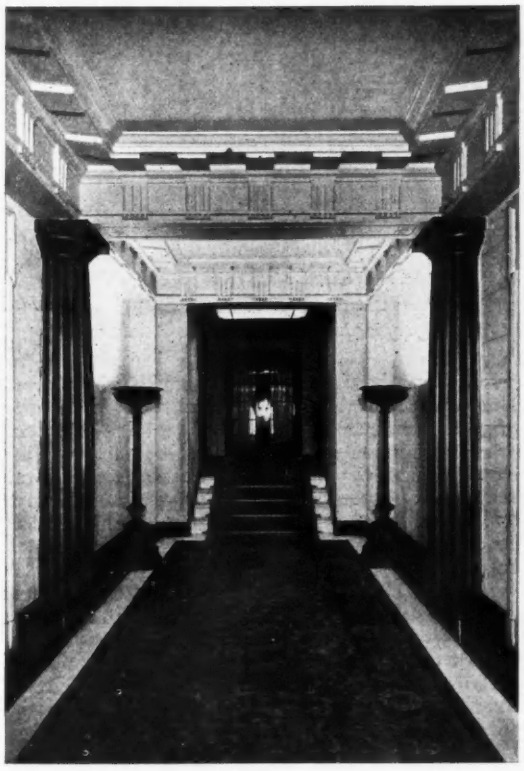


PORTMAN COURT, PORTMAN SQ., W.

By Messrs. Joseph

A near view of the entrance on the Portman Square front.

The main entrance hall. Behind the camera and to the right are staircase and lifts, and farther back to the right, the entrance vestibule. Beyond the doors seen are a lobby, staircase and lifts.



realized that this permanence meets only the rather vaguely defined needs and tastes of the present moment.

Large blocks of flats, such as are here illustrated, are erected and equipped as the " last word " in the flat of today. Well-produced booklets are circulated, setting out the various merits of the schemes, in which statements are made that nothing is omitted which could make these flats more up to date or more characteristic of the flat of " today."

But what about the flat of " to-morrow," and how soon will it come ? When will the public be demanding roof gardens and sleeping porches, and how soon may come a revolution both in incomes and ways of living, in taste and means of expression ?

The three large schemes illustrated here are all built on the steel frame construction system, which will allow of partitions being removed in future years and refixed as requirements dictate, but the chimney stacks for coal fires will certainly prove troublesome, especially in the case of Chiltern Court. Waves of modernism are already lapping the walls of our cities, and this word " modernism " is not so much a label for a passing fashion as a new form of expression in building. This form is firmly based on the requirements of our scientific and mechanical age, from which no reversion can reasonably be contemplated. There is, on the other hand, every indication of further intensive progress in the modernist direction.

Soon the maximum amount of daylight will be universally demanded for our rooms. We daily await the yet uncreated precautions against the noise of our streets and neighbours. Vacuum glass is not yet a practical possibility for our windows, and prevention of all the sound that is carried through the floors of our steel frame buildings, and along the metal pipes and conduits, is still impracticably costly and clumsy in method.

Washable and impervious materials will be demanded for our façades, and the cornices, mouldings and enrichments on which tons of soot are annually deposited in London will no doubt be substituted by more suitable means of ornamentation. Requirements in planning and internal arrangement of flats will certainly undergo considerable change in the next few years as we reach a more practical and simplified system of both living and service than is available at present.

Pending the evolution of really satisfactory materials and forms of construction for the rebuilding of our city homes in the form of large multiple buildings, the public are demanding somewhere to live. Syndicates and companies are wanting investments for their money, and landowners are wanting buildings on their land. The architect, therefore, has to make immediate decisions in designing his buildings, and for his own peace of mind and security finds himself " playing safe " and not risking very much in experiment.

Building laws on the Continent are so less exacting than ours in London and the provinces that experiments, some of them amazingly courageous, are rife abroad, and it is very necessary for the English architect to keep himself informed and profit by such lessons. Many of these experiments show failure, but there are many instructive successes. There is no reason why the very



Chiltern Court stands on a site with frontages to Upper Baker Street (to the left of the picture), Marylebone Road and Allsop Road. This vast stone-fronted building contains 180 suites of flats, a restaurant, and a hairdressing saloon, etc.

CHILTERN COURT, MARYLEBONE RD., W.

By Charles W. Clark



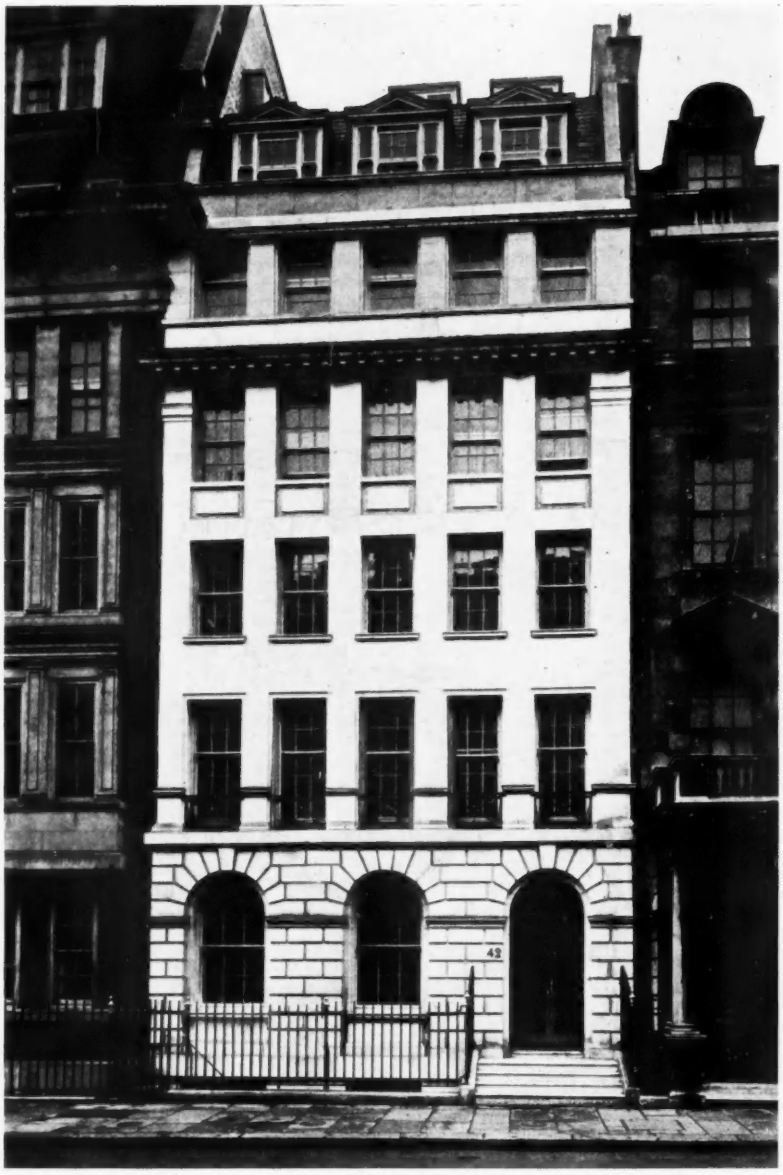
The walls and floor of the entrance vestibule to the restaurant are faced in marble. The walls are grey in tone, with a black plinth, and the floor of alternate grey and white squares, with a black border. The handrailing to the stairs is in bronze.

CHILTERN COURT, MARYLEBONE RD., W.

By Charles W. Clark



The restaurant, looking towards the servery. On the right is the orchestra gallery. The ceiling is decorated with coats of arms of the counties and boroughs served by the Metropolitan Railway. Accommodation is provided for 250 guests.



The elevation of this building has been designed to maintain the character of the adjoining and surrounding property, and is faced with Portland stone.

No. 42 UPPER BROOK STREET, W.

By T. P. Bennett and Son

simplified apartment plan so common in Europe today should not be acceptable to the Englishman today, nor particularly the highly-compressed arrangement of "domestic offices" so popular in America.

These latter characteristics have been well attempted in Stratton House, wherein corridors are reduced almost to a minimum. They are not so well eliminated in Portman and Orchard Courts, though the planning is well compressed.

While the equipment is up to date in Chiltern Court, the planning and façade are on traditional English lines. It must be realized, however, that this block of flats, with rents ranging from £250 to £1,000 a year, caters for tenants somewhat different psychologically from those at Portman and Orchard Courts and Stratton House. This reference is not made disparagingly, but indicates the large section of the middle classes who are still strongly imbued with the national traditions, and who probably prefer to put up with long corridors in order to attain the strict privacy of their separate rooms. It is questionable, though, how long this attitude will last, and in the writer's opinion it is desirable by means of propaganda to remove it, since with its removal will, no doubt, vanish various insular prejudices which may be considered as standing in the way of progress.

It would not be fair to rush into any hasty criticism of Chiltern Court, since, built over the Underground station at Baker Street, many difficult problems were no doubt involved. The system of planning adopted, of a triple corridor all round the site, is disadvantageous to the flats and is also extravagant. This extravagance is proved in making a comparison in accommodation between a £900 flat in Chiltern Court and a £900 flat in Portman and Orchard Courts; the latter, apart from more attractive planning, by the elimination of corridors and closer connection between bathrooms and bedrooms, contains two more habitable rooms. The central or spinal corridor in Chiltern Court connects up the three main lifts and staircases, and provides access to the string of flats on either side of it.

These strings of flats consist mainly of a string of rooms bounded by a long private corridor, lit by the light-wells of the spinal corridors. The arrangement of this system of planning results in all habitable rooms being lit and ventilated on the outside walls, back or front. The site, no doubt, did not allow of lighting rooms on to a large inside court for the sake of quiet, but there is no doubt that this internal court system (where a large enough court can be arranged on a site) is the right solution for planning flat dwellings in our big cities today. If the court can be made large enough and attractive enough, the sacrifice of both aspect and street view is worth while.

Chiltern Court is by far the largest block of flats here illustrated, and contains 180 residences. The ground floor contains banks and shops, apart from the railway buildings. Two-and-a-quarter acres of storage room are contained in the sub-basement and mezzanine floors in the west wing.

Flats, from mansion flats to bachelor flats, occupy the first to the seventh floors, and thirty spare rooms for maids occupy the block facing on to Allsop Place. These rooms are connected by telephone with the various flats and are available for use of the flat tenants on extra payment.

As already described, the main spinal corridor on each floor gives access to the separate residences, and is approached by three main entrance staircases and lifts. The lifts being the recognized means of approach to the various floors, the staircases are not elaborately planned or decorated, and serve as escape stairs for fire purposes. Tradesmen's lifts, situated in the main corridor light-wells, serve all kitchens. There are no separate service staircases

[*Concluded on page 102*



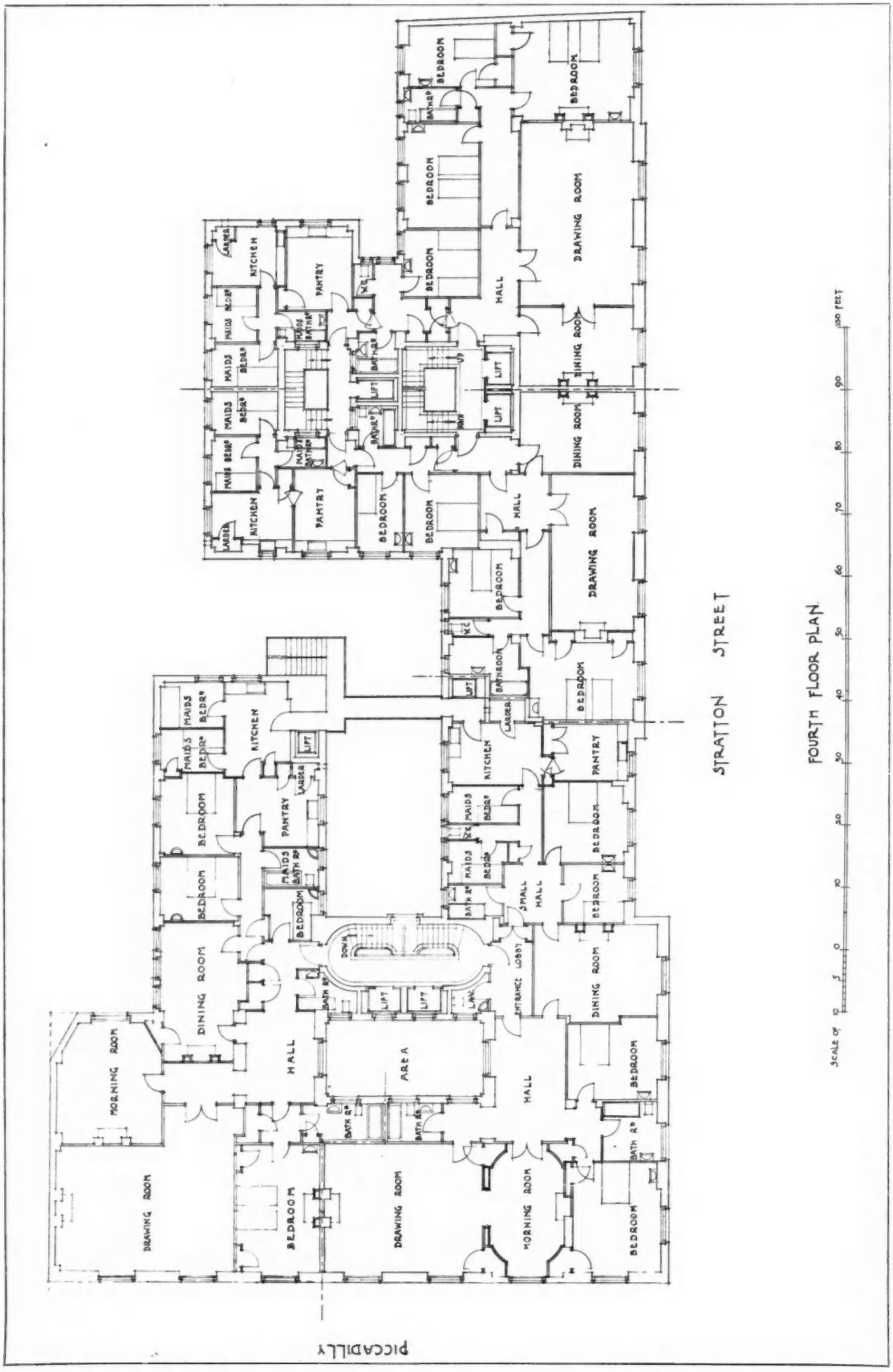
The lounge hall, looking towards the main staircase. To the left is seen the entrance hall, with doors from Upper Brook Street. At the other end of the lounge hall are a passenger lift, and a telephone box.

No. 42 UPPER BROOK STREET, MAYFAIR, W.

By T. P. Bennett and Son

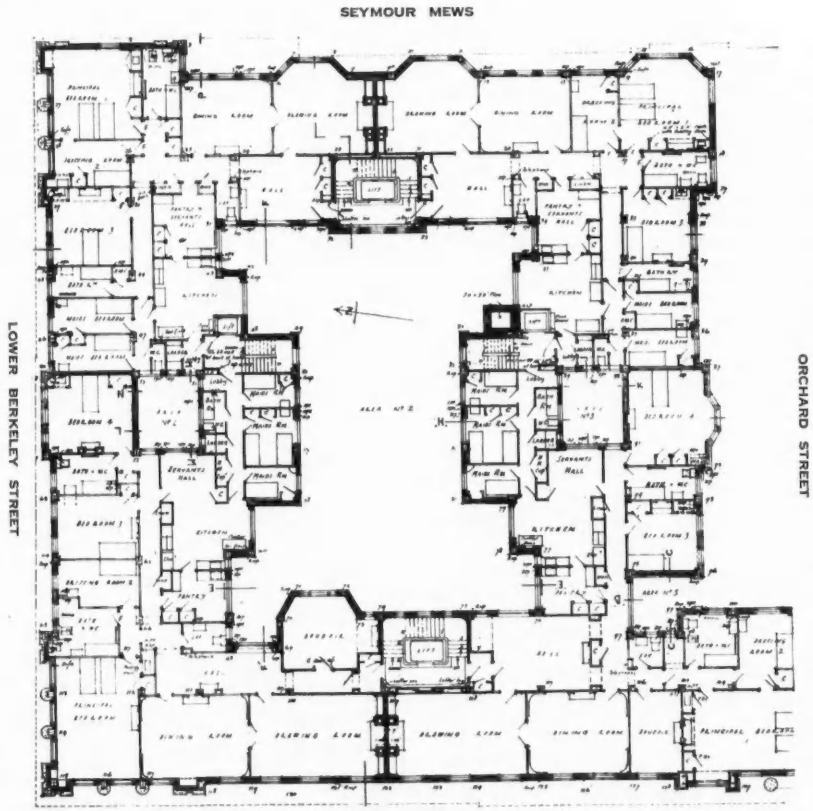


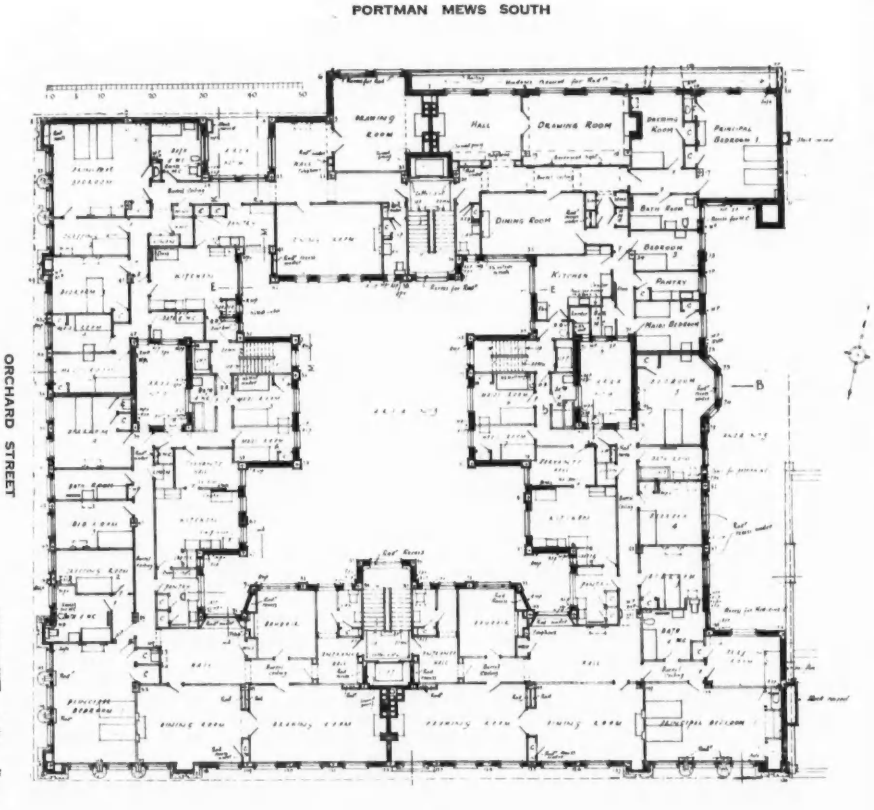
A view in a salon, looking through the folding doors, into the dining-room. The building has two elevations, one to Upper Brook Street, the other to Culross Street, and the flats have been planned with salons and dining-rooms to overlook one of these thoroughfares.



Stratton House, Piccadilly, W. [*By W. Curtis Green.*

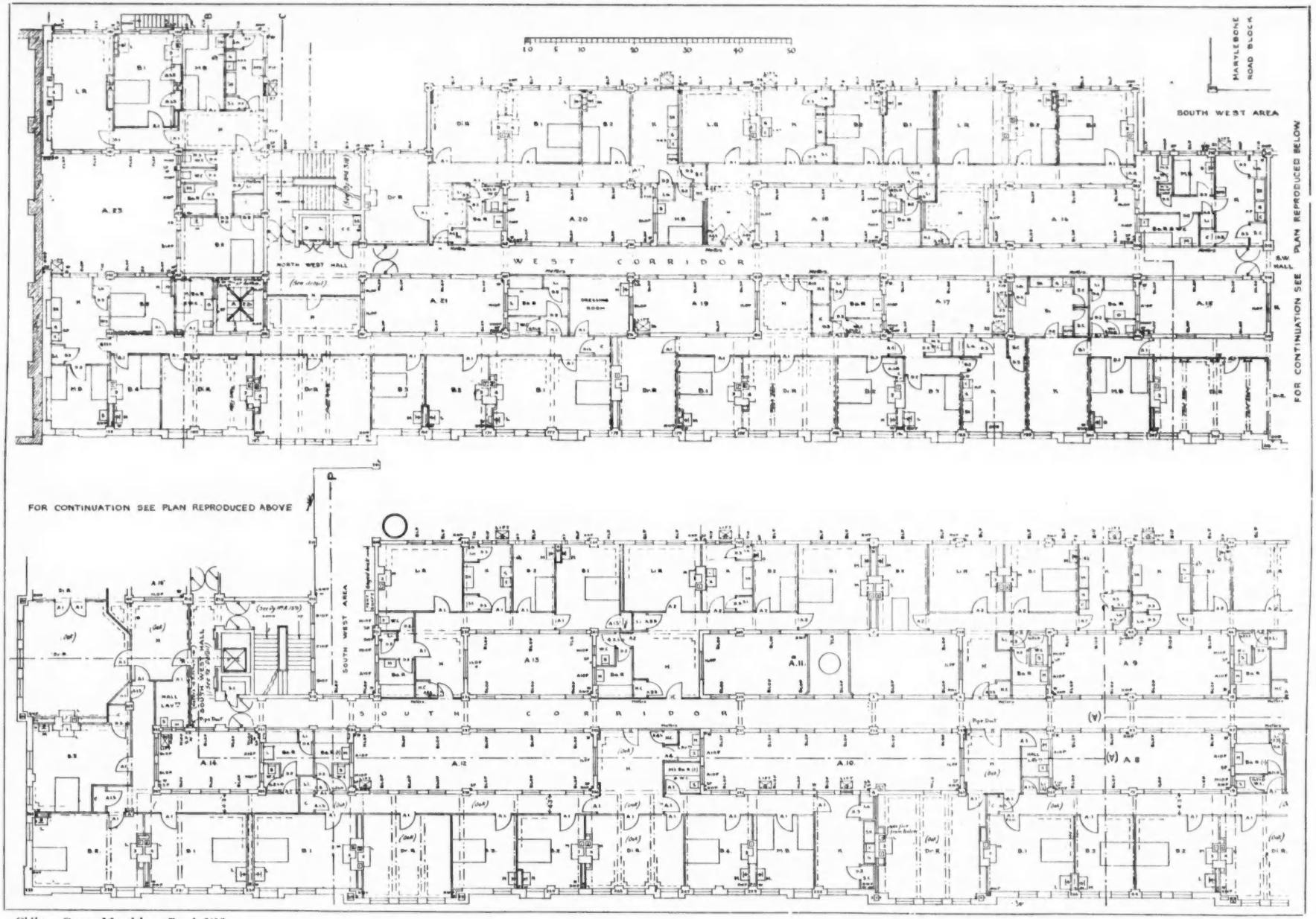
The flats range in accommodation from three reception rooms, four principal bedrooms, two maids' bedrooms, and three bathrooms, to two reception rooms, three principal bedrooms, maids' double bedroom, and two to three bathrooms. All flats have separate entrances and lifts for servants and tradesmen, and are provided with a kitchen, pantry and larder. Among the modern features are panel heating, gas and electric cooking, and internal telephones.





Orchard Court and Portman Court, W.] [*By Messrs. Joseph.*

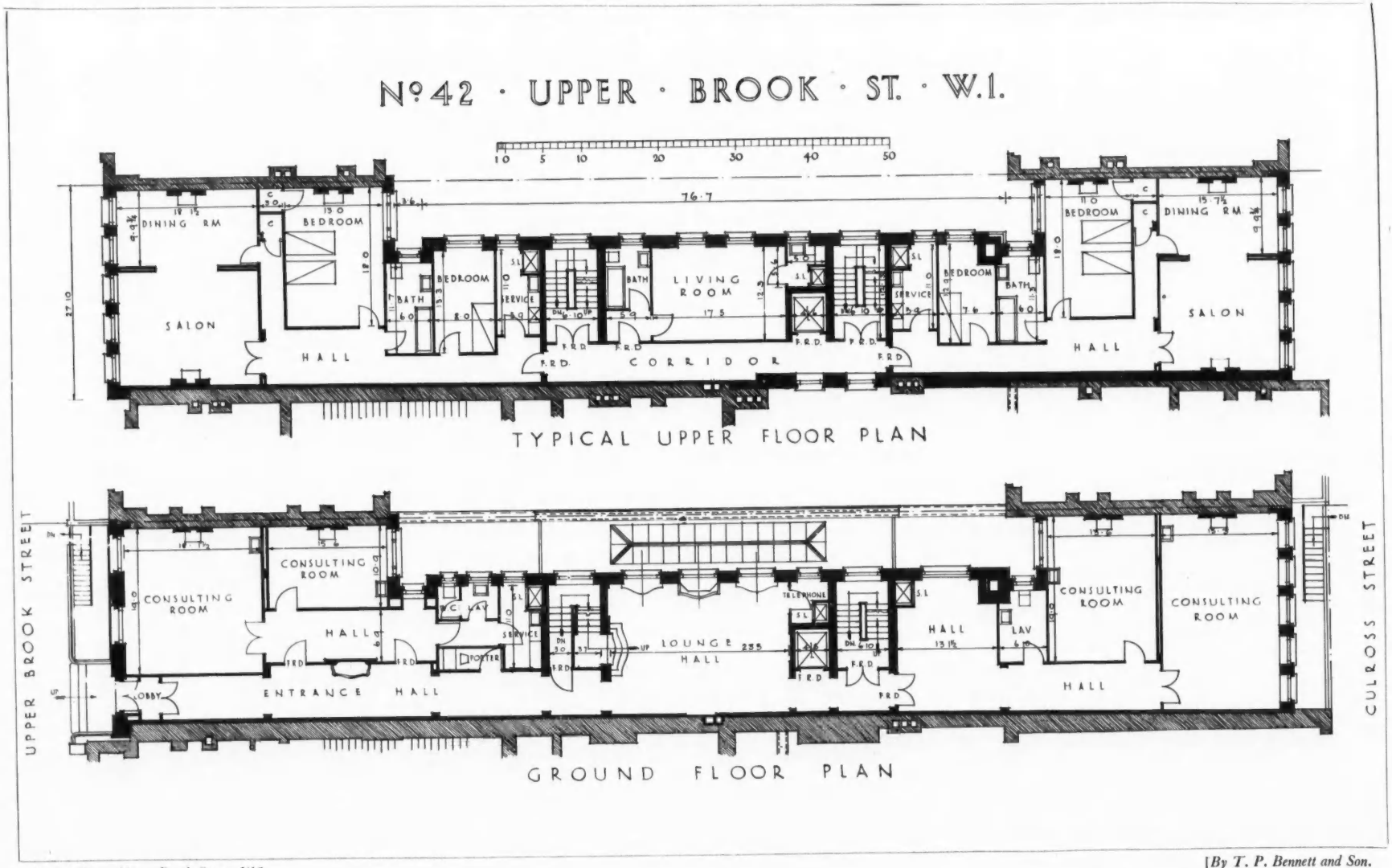
Typical upper floor plans, left, left half of Orchard Court and, right, of Portman Court. The accommodation varies from large flats, with seven bedrooms and three bathrooms, to small flats, with three bedrooms and two bathrooms. There are very large reception rooms. The best room suites are self-contained, and all kitchen quarters are cut off from the rest of the flats. Electric service lifts and internal service stairs are available for tradesmen and servants.



Chiltern Court, Marylebone Road, W.] [*By Charles W. Clark.*

The accommodation ranges from a ten-roomed mansion flat to a bachelor flat, comprising living-room, bedroom, bathroom and kitchen. In every flat a jewel safe is built into the wall in an unobtrusive position, and an automatic telephone is provided on which calls can be made to the porter, restaurant, hairdressing saloon, etc., in addition to outside calls. A wireless reception apparatus is installed in the building, and the principal rooms and kitchens in all the flats are equipped with plugs for loud speaker and headphones.

apparatus is installed in the building, and the principal rooms and kitchens in all the flats are equipped with plugs for loud speaker and headphones.



Service Flats, Upper Brook Street, W.] [*By T. P. Bennett and Son.*

The ground floor is planned to provide physicians' consulting rooms, each having a large reception and waiting-room, with cloakrooms, lavatory and service accommodation. There are six stories in addition to a basement. Seventeen service flats are provided, and on the top floor separate bedrooms and bathrooms, to the extent of sixteen rooms, for men- and maid-servants. A group of five small flats is arranged on the centre of the site, providing a large room, with a small service pantry and bathroom. In the basement are the service kitchen, staff accommodation, valet butler's room, maid's closet room, with separate closets for each flat, hot water and heating chamber, the caretaker's apartments and an office.

to these kitchens. Hot water, central heating and wireless are supplied to every flat, likewise a small built-in jewel safe. Lavatory basins, with built-in medicine cupboards, are provided in the best bedroom of each flat, and all floors are of wood blocks (in the reception rooms and halls of the best flats they are of oak). The building contains a large entrance lounge and a restaurant to seat 250 people, which is accessible both to the public and to tenants. In the basement of the Allsop Place wing is a banqueting room with spring floor for dancing, together with kitchen accommodation. Passenger lifts from all floors communicate with this room.

The general construction of the building is of steel frame throughout, faced on the main streets with Portland stone. The main cornice is of reinforced artificial stone. The mansard roof is of patent flooring, faced with Westmorland green slates. Water is provided by means of two artesian wells which feed three 14,000 gallon tanks, each tank being situated over a main staircase. The double walls between flats are constructed of partition blocks. Mr. C. W. Clark, A.R.I.B.A., is the architect responsible for the work.

Portman and Orchard Courts are two separate blocks of flats occupying a corner and a side of Portman Square respectively. Messrs. Joseph are the architects. Portman Court is a square block with a central service court. Four large family flats occupy each floor. They are approached by two main staircases and lifts. Large ground-floor entrance halls are also embodied. The rents vary from £750 to £1,300 per annum, inclusive of rates. Extra rooms are available for servants as also are a limited number of garages.

Orchard Court, which is roughly a double cube on plan, is bounded by thoroughfares, and contains two service courts and an open central court on which latter some main bedrooms face. The rents of these flats are approximately the same as those of Portman Court. There are eight flats on each floor, the general arrangement being a duplicated version of Portman Court. Service stairs and tradesmen's lifts communicate with the servants' quarters in each flat. Both buildings are equipped with every convenience. Shops and banks occupy the main ground-floor areas. The elevations are of multicoloured bricks, with Portland stone dressings. The design of the elevations might have been more successful had a modern style been adopted, since there is not enough set-back of wall to accommodate properly a column and pilaster treatment.

Stratton House, Piccadilly, designed by Mr. W. Curtis Green, A.R.A., is in the writer's opinion one of his most successful works. The façades of Portland stone keep their scale admirably throughout all their detail, and such detail is kept commendably simple. The building is planned with two main staircases and lift approaches. Four large flats are arranged on each floor, apart from various spare rooms on the upper floor, and the plans are well worthy of study. A series of small vestibule halls are arranged in place of corridors, giving to the flats an extremely pleasant character. The rents vary from £600 to £1,500 per annum, exclusive of 10 per cent. for service charges and exclusive of rates. The building is equipped throughout with every possible convenience, including a panel heating system and an extract system of ventilation.

No. 42 Upper Brook Street is a solution of an entirely different problem. On the site of a private house with a frontage of only 28 ft. has been designed by Messrs. T. P. Bennett and Son a collection of small service flats, with four consulting rooms on the ground floor. Excellent use has been made of the floor space available, allowing of a small flat back and front and a one-room apartment in the centre.

A very difficult problem was set for the elevation, in Portland stone, to conform in some way with the private house character of the street. It suffers rather heavily in the matter of scale with the buildings on either side, though a serious attempt has been made to keep the local character of the eighteenth-century houses. G. G. WORNUM.

SOME BOOKS OF THE YEAR

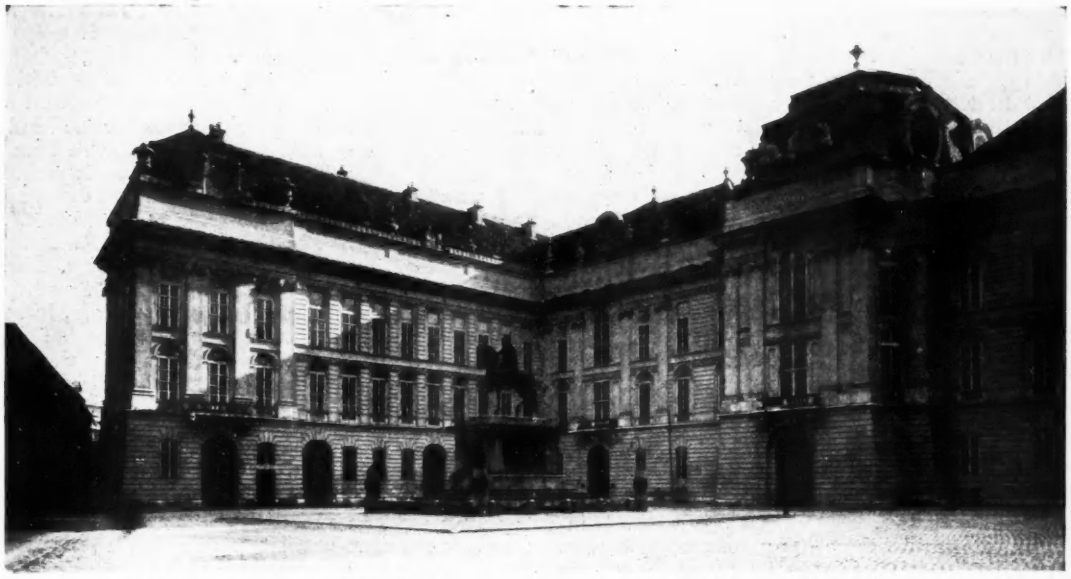
An Architect's Survey

BY GRAHAME B. TUBBS

ENGRAVED upon a book-plate that recently came into the possession of the writer were the words, "The Book Killed Architecture." The original owner was probably a man of pronounced mediævalist views, with whom it would be unwise to argue unless the night was yet young. Even then such a discussion would, more likely than not, be fruitless; in an article such as this it would be both futile and out of place. Whether books did or did not kill architecture, it is undoubtedly a fact that they created the professional architect—that is, the designer of buildings whose knowledge of principles and of details is derived from books rather than from the traditions of the mediæval master-builder. Books being the cause of the architect's existence, he would be ungrateful indeed if he did not treat them with veneration, if not with love.

The books of interest to architects published during the year are many, and among them are several of importance and many of interest. There are no works dealing with the philosophy of the art, although a revolutionary theory has been advanced as to the origin of Christian church architecture, and Sir Reginald Blomfield, R.A., has written a charming volume of architectural *Belles-Lettres*. The majority of the books published deal with the buildings of the past, notable among which are a new edition of "Garner and Stratton," a fine French monograph on the Acropolis, and a new history of Greek and Roman architecture. Besides these archæological works, there are treatises on special problems (such as Powys's *The Repair of Ancient Buildings*), on special types of buildings, and on individual materials, such as wrought iron, glass and stone. There are, as well, a good crop of collections of modern work, chiefly from the Continent, and some interesting Town Planning Reports.

Sir Reginald Blomfield's *Byways* consists of essays recording his impressions of those buildings in the South of France, in Central Europe, and in Scandinavia that he visited in his wanderings. They make delightful reading, because of their grace of style and of their writer's outspoken criticisms of the buildings he mentions. He has strong predilections and an independence of judgment that refuses to admire because it is the fashion to do so. Of his remarks about baroque (which he describes as "the architecture of the alcove"), *The Times* reviewer wrote that they reminded him of a bishop's description of his first visit to a night club! Sir Reginald seemed to be glad to come to the bracing air of the North, and his appreciation of Stockholm and its town hall and other new buildings is interesting reading; he says of the town hall that it is "the last word, not of architecture, but of the arts and crafts movement." Another book of architectural criticism, but of a very different sort, has been published this year, after remaining unknown for over 100 years. It is *The Lectures of Sir John Soane, R.A.*, that were delivered while he was Professor of the Royal Academy. Although his style is sometimes rather heavy, most of Soane's architectural judgments are sound and acceptable today, even if they would not have found favour fifty years ago.



From Byways : Leaves from an Architect's Notebook.] [*By Sir Reginald Blomfield* (*London : John Murray*).

Joseph-Platz, the courtyard of the Hofburg, Vienna ; with the monument of the Emperor, Joseph II.

The lectures, which are edited by A. T. Bolton, F.S.A., are very fully illustrated by 120 reproductions, selected from the 2,000 drawings that were specially made by Soane's pupils.

An ingenious German, Herr Blossfeldt, has given us *Art Forms in Nature*, which, although not exactly an architectural book, is nevertheless one of first-rate importance to architects, containing as it does a great deal that will prove most inspiring to the designer. It consists of a series of wonderful photographs of natural plant-forms, either life-size or enlarged or reduced. Many of the examples are of surpassing beauty, and some of them bear striking resemblance to forms familiar both in architecture and in the minor arts and crafts. It is such a good and original book that everyone wonders why he himself has not done it. If the architect is thrilled by Herr Blossfeldt's photographs, he will be equally amused and instructed by H. B. Creswell's *The Honeywood File*, which needs no recommendation to readers of THE ARCHITECTS' JOURNAL, as it appeared in these pages before being issued as a volume.

Although there have been no books of architectural biography published this year, a sumptuous volume of the *Work of Ralph Adams Cram* and his partners has appeared. This book contains illustrations of an immense amount of work designed by Dr. Cram, who is one of the outstanding personalities of American architecture. He has done for religious art in the United States what McKim did for civic architecture. Among his most important works are the completion of the Cathedral of St. John the Divine, New York; West Point Military Academy, and the new chapel to Princetown University.

The class of book that is most plentiful, apart perhaps from those which verge on the archæological, is that dealing with one particular type of building. There have been many such published this year. Two of them deal with the English country house, in which subject interest is unabated. They are *Recent English Domestic Architecture*, by H. de C. Hastings, and F. R. Yerbury's *The Small Modern English House*. The houses in the former are arranged in order of period, starting with those in mediæval or Tudor style and ending with T. S. Tait's scheme at Silver End. The other volume concludes with a series of photographs of modern furniture suitable for such houses, and their style, for the most part, follows the same trend as the houses they are designed to furnish. Complete interiors, both at home and abroad, can be studied in *The New Interior Decoration*, by Dorothy Todd and Raymond Mortimer, although in this case any design that has a hint of " period " is rigorously excluded, together with anything which while " claiming to be modern is only eccentric." While on the subject of the home, mention must be made of C. M. Villiers-Stuart's delightful book on *Spanish Gardens*. This is fully illustrated by pen-and-ink and water-colours and deals chiefly with old examples.

Sir Felix Clay's book *Modern School Buildings* is a classic, and those interested in this class of building will be glad to hear of the publication of a third edition. This has been completely rewritten and brought up to date by the inclusion of such modern innovations as open-air classrooms and more complete bathing facilities, and the latest type of equipment. Owing to exigencies of expense the section dealing with foreign schools has had to be omitted. This is a pity, since one would think that English designers have something to learn from abroad, especially from the post-war German schools.

From Germany come monographs on the only classes of building, excepting housing and municipal works, that have been erected there in any quantity since the war. They are cinemas, cafés and restaurants. The first is entirely given to the *Cinemas of Fritz Wilms*, which extend from huge " super " houses to quite small café cinemas. There is one point of interest to be noted, and that is that, except in a few cases, galleries have been avoided and all the seats put on one level. *Moderne Cafés, Restaurants und Vergnugungesstatten* gives many very striking modern examples, most of which are from Germany. The lighting arrangements are of the greatest interest, both technically and artistically. Examples of recent work by the municipalities of Germany, including houses, flats, banks, public conveniences and gymnasia, can be seen in *Städtebau Deutschlands*, while in *Nieuw Nederländsche Bouwkunst* post-war Dutch buildings can be studied. In the English introduction the author, Professor Wattjes, says of Holland, " The word ' modern ' has little sense there because no opposite tendency exists. It is used, if at all, only to designate those who fight the new architecture on behalf of the newest." This is quite true; in fact, if anyone wanted to put an " order " on a façade in Amsterdam (which is

most unlikely), he would probably have difficulty in getting the drawings "passed" by the authorities.

Much of the effect of the very "modern" work depends upon the use of glass, and Arthur Korn has written a book, *Glas in Bau und als Gebremschsgegenstand*, in which he shows the great importance of this material in many of the designs of such men as Mendelsohn, Bruno Paul and Le Corbusier, and how effectively it is used in various new forms. A Frenchman, Louis Barillet, has written a book, *Le Verre*, in which he reproduces examples of modernistic stained glass design, and various methods of using glass, in conjunction with modern metals, for all sorts of purposes hitherto undreamed of. *Le Luminaire et les Moyens Declairages Nouveaux* (Moreau) shows how glass and metal can be combined to produce interesting lighting fixtures.

By a curious coincidence there have been published during this year several books on wrought iron. The most comprehensive survey of the whole subject is by an American, and is G. K. Geerling's *Wrought Iron in Architecture*. He gives chapters to every country, but devotes most space to Italy and Spain, reproducing in these cases many excellent measured drawings, but in the sections on French, English, and United States ironwork he relies exclusively on photographs. Maxwell Ayrton and Arnold Silcock's *Wrought Iron* (Country Life) deals with English work only. There are many very fine photographs but few drawings, which is a pity. Tijou has a chapter to himself, and the transcripts of the relative building accounts at Hampton Court and elsewhere are printed. Italian ironwork is exhaustively treated in *Il Ferro Buttuto* by Corrado Ricci, a folio containing 556 plates from all periods. Modern French examples, giving the work of such modern masters of the craft as Edgar Brandt, Subes, and Schenck, show to what degree of delicacy and elaboration new alloys, worked by modern tools such as the acetylene blow-pipe, can be taken.

The next group is one that deals with the building crafts, and includes several good books. Messrs. Batsford have made an addition to their series of practical treatises in *Modern Practical Masonry* by E. G. Warland. New methods of machine working and the growth of steel framing for buildings have revolutionized the trade in some respects, and these new problems are dealt with in a clear and workmanlike way, but the importance of the study of the nature of the building stones and of the geometry of "setting-out" have not been overlooked. The book is clearly intended for the town mason rather than the man working in the country.

Each of the senior University Presses publish monographs on brickwork this year. From Oxford comes the late W. R. Jagger's excellent treatise, *Brickwork and its Construction*. In this handy book the subject is treated in a much more exhaustive way than is possible in an ordinary book on building construction; the scientific and artistic aspects are stressed. Nathaniel Lloyd's *Building Craftsmanship in Brick, Tile and Stone Slates* is illustrated by photographs rather than diagrams, and the subjects chosen include details of both old and modern work. The section on tile and stone slates is the most useful. The only book on woodworking is by J. F. Dousett, and is called *Stair Building and Handrailing*; it seems to be very complete, and should give the novice all he needs to be initiated into the mysteries of this complicated craft.

Specification is in many ways the best of construction books, as it is the most complete, and is kept up to date by constant revision. The 1929 issue has, as well as specifications for all trades, authoritative articles on "Baths and Wash-houses" and "The Planning of Large Kitchens," and the editor, F. Chatterton, writes about the new type of gasometer, which is polygonal on plan and of fixed height, and offers considerable architectural possibilities.

One of the most important books of the year comes under the head of construction, but it is more than a mere construction book, as it embodies the practical experience of fifty years of the Society for the Protection of Ancient Buildings. It is A. R. Powys's *The Repair of Ancient Buildings*. Mr. Powys restates clearly the ideals of his society to preserve old buildings, but to avoid making reproductions of damaged parts when this involves the destruction of what remains of the original work. He describes the best means of repairing stonework by tile and plaster, how to protect and repair old roofs and other carpentry damaged by decay or insects, and the best method of coping with the most common troubles that beset the architect who has to repair an old building. It is a book that cannot be too widely distributed, both among architects and those who have charge of ancient buildings.

Each year sees the publication of books about the buildings of almost every



From Lectures on Architecture.] [*By Sir John Soane* (*London: Sir John Soane Museum*).

The Princes Street vestibule of the Bank of England.

(*This book is published for students at the special price of 10s. 6d. net.*)



From The Cottages of England.] [*By Basil Oliver (London: B. T. Batsford, Ltd.).*

Chipping Hill, Witham, Essex.

period of civilization. The earliest in point of time this year is *Les Temples de Karnak* by Georges Legrain, published in Brussels. This is a folio of 270 pages which is illustrated very fully by excellent photographs, many being details of carving, but oddly enough there is not a single plan. A work on the grandest scale comes from Paris, namely, the superb folio, *L'Acropole*, by Ch. Picard. In the text are inserted details of construction and conjectured restorations, but the body consists of a series of seventy-five collotype plates of general views and details of the Acropolis itself and all the buildings upon it, with the exception of the Parthenon, to which a separate volume has already been given. Another book of first importance is P. S. Robertson's *Handbook of Greek and Roman Architecture*, from the earliest times to the foundation of Constantinople, and it should be read by all interested in classic times.

A revolutionary theory as to the origins of Christian church architecture was propounded by M. Strygzowski in lectures he delivered at London University, which have been published in book form by Messrs. Batsford under the title of *Early Church Architecture*. His belief is that we should look for the beginnings of Christian architecture not to Greece and Rome, but to the almost vanished timber architecture of Northern Europe. It is a most fascinating theory and well developed in this important book. Timber architecture reminds one of the fine folio book of plates of the old domestic architecture of Normandy, which is largely of wooden construction. Raymond Quenedy has issued a second volume of his work *Normandie*. It contains plates of some really magnificent old buildings, both *manoirs* and town houses, in the Caen and Bayeux districts; what a chance for some French architect with sympathetic understanding, and architecturally unsophisticated, to adapt them to French country houses! The horrors of the Normandy coast form a sad example of what happens when the French architect of today "goes picturesque."

Garner and Stratton's standard work, *Domestic Architecture of England during the Tudor Period*, covers about the same time as the above, and it is interesting to compare the two in the new edition which has just been published. This is one of the standard books that is never likely to be surpassed either for its matter or for its *format*. Mr. Stratton has made considerable alterations in this edition: twenty new houses have been added, but none of the old examples have been omitted. The size has been slightly reduced and the houses advantageously regrouped according to the material of which they were made. This is undoubtedly one of the important architectural bibliographical events of 1929.

Basil Oliver's *The Cottages of England* is an excellent book, and one that fills a gap, as the whole field has never before been surveyed. He, too, groups his cottages according to material, and he has confined himself exclusively to cottages and has omitted the larger buildings such as farmhouses. The letterpress is excellently done, and the beautiful illustrations are chosen from the finest examples of the wealth of material which England still possesses. The fourth volume on *London*, of the Royal Commission of Historical Monuments, is given to the City, and includes St. Paul's Cathedral, the churches built before 1714, and the Temple. It is rich in plans and photographs and forms a mine of detail of the Middle Ages and the Renaissance and is really extraordinarily good value for a guinea. Another survey of a different kind is the Burlington monograph, *Georgian Art*, which is a general review of all aspects of art during the reign of George III. It makes one realize the homogeneity of every branch of art in the eighteenth century, a quality conspicuously lacking today. Can it be that our friend of the book-plate was right after all?

One of the most cheering things about the year's books is the indication of the interest taken in matters of social organization. It is clear that the good work of those societies that make public amenities their concern is having effect. Propaganda is still being effectively carried on, and an excellent example of it is Clough Williams-Ellis's *Cautionary Guide to St. Albans* (6d.). In it, photographs of this city are shown with good old and new buildings by the side of the most lurid examples of the untidy and the shoddy. These, together with the amusing running captions, should have a powerful effect and convince everyone that the terrible state of our towns is quite unnecessary and could be avoided by creating a demand for better things.

If the waste of effort and ugliness to which we are condemned by the lack of forethought of our forebears is to be avoided in the future, our towns must not be allowed to develop haphazard; many towns are already alive to the necessity for making proper arrangements for their expansion, and several Regional Planning Schemes have been prepared this year. The *North Middlesex* scheme includes the northern suburbs of London, parts of which are already densely populated, while the outer areas still remain semi-rural. The authors have made recommendations for retaining open spaces and forming stream-side parks, and advocate the reservation, for industrial development, of certain districts and the efficient planning and control of the parts that are still undeveloped. The *Thames Valley* scheme, prepared for the C.P.R.E., deals with the preservation of a very lovely part of the country that is being rapidly industrialized. The *West Sussex* survey attempts to co-ordinate the development of a group of seaside towns, while *The Future Planning of Wallasey* deals with a district that is the natural playground of Liverpool, but which has already been attacked by the bungalonic plague.

There are several good books for school use. *Architectural Drawing* (10s. 6d.), by G. D. Gordon Hake and E. H. Button, is intended for the student

during his first years and gives in handy compass good advice on shadows, lettering, perspective and sketching; and examples are reproduced from work by the foremost draughtsmen of the day. *Architectural Shadow Projection*, by J. M. Holmes, treats of this subject at greater length, his aim being to make the student master the principles rather than to give him a crib for all the most usual shadow forms. Messrs. Tiranti are to be congratulated on their reprint of Normand's *Parallel* of the Orders. This is one of the best books on the subject, and at six shillings is wonderfully good value; it has a substantial and pleasant binding, is of good paper, and the reproductions are excellent and to a large scale. G. B. T.

OUR COLOUR PLATES

"Adew Edinburgh, thou heich triumphand toun, within quhose boundis richt blythful have I bene": these lines of Sir David Lindsay (1530) that stand as one of the quotations before *Haunting Edinburgh*, by Flora Grierson (London: John Lane, the Bodley Head, Ltd., price £1 net), prepare one for surrender to the spirit of the ancient Scottish capital. It is clear that both the author and Katharine Cameron, who has supplied twenty-two illustrations—very well reproduced, sixteen in colour, of which one appears in this issue—have allowed its fascination to soak deep into their consciousness. More than that, they are able to convey it to the reader; imperceptibly, thus, he assimilates a vast quantity of historical allusions.

A History of British Water-Colour Painting (London: B. T. Batsford, Ltd., price 25s. net), from which our second colour plate is borrowed, is a new and revised issue of this closely-documented study by a scholar who, as Keeper of the Department of Paintings in the Victoria and Albert Museum, had unrivalled facilities for its preparation. Of its sixty-four coloured plates, not the least attractive are those devoted to miniatures. In his foreword, Sir Herbert Hughes-Stanton, R.A., President of the Royal Society of Painters in Water-colours, says that the art of water-colour painting dates from very early times if the work of the first miniaturists and illuminators is to be included. He adds that it is an art peculiarly favoured in England, though originating, as we know it, with the Flemings of the sixteenth century. The reproductions are of the first excellence, and the biographical appendix is most valuable.

Our third colour plate is a reproduction from Paul Sandby's picture of the river view from the old Somerset House Terrace, in the Victoria and Albert Museum, and is one of the many that have adorned the pages of *The Connoisseur*.

THE ARCHITECTS' DIARY

WEDNESDAY, JANUARY 8

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Regional Planning in S.W. Lancashire." By T. Pierson Frank, M.INST.C.E., F.S.I. **8 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. "Combustion, Wind and Flue Equipment." By C. A. Masterman, B.A., A.I.C., M.S.C.I., M.S.I.E. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS. Lancashire and Cheshire Branch. At the Engineers' Club, Albert Square, Manchester. "Some Problems in the Design of Modern Steel Frame Multiple Story Buildings." By V. H. Lawton, M.I.STRUCT.E. (Lantern Illustrations.) **7 p.m.**

THURSDAY, JANUARY 9

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Science Standing Committee. **4 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Modern Design and Decoration." By Howard Robertson, F.R.I.B.A., S.A.D.G. (Lantern Illustrations.) **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. 6 p.m. Dundee Sub-Centre. At the University College, Dundee. "Lubrication." By G. H. Chalmers. **6 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Engineering Contracts, some Legal Problems affecting Structural Engineers." By E. J. Rimmer, M.ENG., A.M.INST.C.E. **6.30 p.m.**

SATURDAY, JANUARY 11

Sunrise, 8.3 a.m. Sunset, 4.13 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. First of Series of Six Non-Technical Lectures on Present-Day Architecture. "Architecture in Daily Life." By Howard Robertson, F.R.I.B.A., S.A.D.G. **3 p.m.**

MONDAY, JANUARY 13

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "The Work of the Building Research Station." By Dr. R. E. Stradling, D.SC., PH.D. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Western Centre. Annual Dinner at Cardiff.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, S.E.1. Paper on "Oil versus Solid Fuels." By H. A. Leadbeater. Light refreshments at 6.30 p.m. **7 p.m.**

TUESDAY, JANUARY 14

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the North British Station Hotel, Edinburgh. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. **7 p.m.**

WEDNESDAY, JANUARY 15

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Quality in Pottery." By Joseph Burton, A.R.C.SC.I. Professor H. E. Armstrong, PH.D., LL.D., D.SC., F.R.S., will preside. **8 p.m.**

L.C.C. CENTRAL SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. Continuation of a course of twenty-four lectures on the History of Architecture (Part I, Ancient). By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

THURSDAY, JANUARY 16

INSTITUTION OF ELECTRICAL ENGINEERS. Hampshire Sub-Centre. At University College, Southampton. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. **7.30 p.m.**

FRIDAY, JANUARY 17

ARCHITECTURE CLUB. A Supper-Discussion Meeting will be held at the Architectural Association, 34 Bedford Square, W.C.1. Topic: "The Charing Cross Bridge Scheme." 7.45 for 8 p.m. **8 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Smoking Concert to be held at Carr's Restaurant, 264 Strand, W.C. Tickets may be obtained from the Secretary.

LONDON SOCIETY. At the Royal Society of Arts, 18 John Street, Adelphi, W.C.2. "London's Parks and Open Spaces." By F. W. Parker, F.S.I. **5 p.m.**

SATURDAY, JANUARY 18

Sunrise, 7.57 a.m. Sunset, 4.24 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to Tower Bridge. Meet at Superintending Engineers' Office, Tower Bridge, at 2.30 p.m. **2.30 p.m.**

UNIVERSITY COLLEGE, Oxford. Conference in the Hall. The Rt. Hon. H. A. L. Fisher, F.R.S., P.B.A., will preside. Exhibition of drawings by P. Wilson Steer, Sir Charles Holmes and Gilbert Spencer, open from 2 p.m. Tea 4.30 p.m. **2 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. Annual Dinner at the Midland Hotel, Birmingham.

MONDAY, JANUARY 20

R.I.B.A., 9 Conduit Street, W.1. General Meeting. President's Address to Students. Criticism by Louis de Soissons, O.B.E., F.R.I.B.A., on work submitted for Prizes and Studentships. Presentation of Prizes. **8.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. South Midland Centre. At the University, Edmund Street, Birmingham. "Voltage Control of Large Alternators." By H. W. Taylor. **7 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." (Lecture I.) By Harold J. L. Wright. **8 p.m.**

TUESDAY, JANUARY 21

KING'S COLLEGE, Strand, W.C.2. Department of Civil Engineering. First of a course of three lectures on "Bridges and Bridge-Construction." By C. H. Lobban, D.SC., A.M.INST.C.E. **5.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. East Midland Sub-Centre. At the College, Loughborough. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched Arc Switch." **6.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon.**

WEDNESDAY, JANUARY 22

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Architectural Lighting." By R. W. Maitland. **8 p.m.**

THURSDAY, JANUARY 23

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. At Birmingham. "Modern Improvements in Resistance Welding Machines." By C. A. Hadley.

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Setting out and erection of Multiple Story Buildings." Informal Discussion to be opened by G. F. C. Caswell. **6.30 p.m.**

FRIDAY, JANUARY 24

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. Ordinary Meeting. At the Chamber of Commerce Buildings, New Street, Birmingham. "New Underground Railway Offices, St. James's Park—Notes on Foundation and Erection." By M. J. C. McCarthy, A.M.INST.C.E. **6.30 p.m.**

SATURDAY, JANUARY 25

Sunrise, 7.50 a.m. Sunset, 4.36 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Second of Series of Six Non-Technical Lectures on Present-Day Architecture. "The House You Want." By R. Randal Phillips, Hon. A.R.I.B.A. **3 p.m.**

MONDAY, JANUARY 27

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Some Aspects of Contemporary Continental Decoration." (Lantern Illustrations.) By J. M. Holmes. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." By Harold J. L. Wright. (Lecture II.) **8 p.m.**

TUESDAY, JANUARY 28

KING'S COLLEGE, Strand, W.C.2. Department of Civil Engineering. Second of a course of three lectures on "Bridges and Bridge-Construction." By C. H. Lobban, D.SC., A.M.INST.C.E. **5.30 p.m.**

MONDAY, FEBRUARY 3

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." By Harold J. L. Wright. (Lecture III.) **8 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Business Meeting. Election of Members. **8 p.m.**

TRADE NOTES

A record without parallel in the history of architectural development is presented by the advertisement pages xxi—xxxii of this issue. In these pages the London Brick Company and Forders, Limited, record by means of drawings by Mr. J. D. M. Harvey the outstanding jobs of the year in which both phorpres Flettons and other bricks have been employed.

Mr. Harvey's architectural renderings are known wherever English architecture is spoken of, and this series of thirteen drawings represents some of the most outstanding buildings in this country. The buildings illustrated are in London: Imperial Chemical House, by Sir Frank Baines; India House, by Sir Herbert Baker, A.R.A.; Sun Life Assurance Building of Canada, by Septimus Warwick; William Booth Memorial Buildings, by Gordon and Viner and Sir Giles Gilbert Scott; Royal Mail Steam Packet Building, by Sir Edwin Cooper; Stratton House, by W. Curtis Green; Seventh Church of Christ Scientist, by Paul Phipps; Times Furnishing Company, by Cecil J. Eprile; London School of Tropical Medicine, by P. Morley Horder and Verner O. Rees; Dominion Theatre, by W. and T. R. Milburn; Ideal House, by Gordon Jeeves and Raymond Hood; Flats in Portman Square, by Messrs. Joseph; and Chiltern Court, by Charles W. Clark. The importance of these buildings may be gauged by the fact that nine of them are illustrated in the editorial section of this special number.

Messrs. Rhodes Chains, Ltd., have sent us a copy of their new folder. It contains illustrations and prices of Greenwood's ventilators, which this firm are now controlling and marketing. This business has been taken over from the Greenwood Ventilating Co., Ltd., which was originally established by T. W. Greenwood in 1879. Greenwood's larder lights, ventilights and skylight ventilators are manufactured in cast iron, steel galvanized or copper, and are supplied ready to fix. They are claimed to provide efficient ventilation with lighting, and are being widely adopted in all parts of the country by leading architects, the London County Council, War Office and many important local authorities. Greenwood's ventilating windows cost nothing to fix: they are merely built in. The skylight ventilators may be used on any pitch of roof, and require no flashings or opening gear. Other designs include the new Permavent and Ventex skylights in copper or steel galvanized, movable louvres, while Hoppa vents and airbricks are catered for. Full details may be obtained from Messrs. Rhodes Chains, Ltd., 8–10 Charing Cross Road, London, W.C.2, and samples may be seen in the showroom.

A new brochure published by the Workington Iron and Steel Branch of The United Steel Companies, Limited, contains notes of the various grades and brands of pig iron made at the Cumberland Works, notably the "Distington," "Workington," and "Harrington" brands, together with some photographs of fractures, and complete analyses of all grades. With the aid of this brochure those who buy and mix pig irons either by fracture or by analysis can, it is claimed, determine the iron best suited to their uses, with a minimum of trouble. Copies of the Publication (W 109) can be obtained on request from the Publicity Dept., The United Steel Companies, Ltd., Sheffield.

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, general contractors and some of the sub-contractors for the buildings illustrated in this issue :—

Lloyds Bank, Liverpool (pages 40 and 44–48). General contractors, Wm. Moss and Sons, Ltd. Sub-contractors: Henderson and Glass, steel; Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., floors; Diespeker & Co., Ltd., terrazzo; Samuel Elliott and Sons (Reading), Ltd., bank fittings; Henry Hope and Sons, Ltd., casements; Waygood-Otis, Ltd., electric lift; G. N. Haden and Sons, Ltd., heating; Docker Bros., Induroleum flooring; H. H. Martyn & Co., Ltd., gates; Mellowes & Co., Ltd., lanterns; Birmingham Guild, Ltd., wrought ironwork; W. J. Harries, Ltd., Sika waterproofing; J. C. Edwards, silver-grey bricks; Williams and Watson, Ltd., pavement lights and glazing; W. and R. Leggott, Ltd., locks; Gilbert Seale and Son, Ltd., stone carving.

National Institute of Medical Research (pages 48–51). General contractors, W. J. Mitchell and Son. Sub-contractors: Tyler and Freeman, electric light; Roberts, Adlard & Co., roof tiling; James Gibbons and Sons, metal windows.

House and outbuildings, Shepherd's Hill, Buxted, Sussex (pages 81–88). General contractor, The Ringmer Building Works. Sub-contractors: Benjamin Ware and Sons, Ltd., bricks and tiles; Vita Glass Marketing Board, glass; R. W. Brooke & Co., Ltd., flooring; G. M. Callender & Co., Ltd., Protex waterproofing materials; Young, Austen and Young, central heating; Bratt, Colbran & Co., and Candy & Co., Ltd., grates; Gillham and Jones, Bagues, Ltd., and Troughton and Young, Ltd., electric light fixtures; H. Pontifex and Sons, Ltd., sanitary fittings; James Gibbons, Ltd., door furniture; Crittall Manufacturing Co., Ltd., casements; Fenning & Co., Ltd., marble; Heal and Sons, Ltd., textiles; Tuke and Bell, Ltd., septic tank.

Stratton House, Piccadilly (pages 91, 92 and 98). General foreman, W. H. Medlam. General contractors, Holloway Bros. (London), Ltd., who were also responsible for the excavation, foundations, joinery and mantels. Sub-contractors: Caxton Floors, Ltd., reinforced concrete; London Brick Co. and Forders, Ltd., Fletton bricks; Farnley Iron Co., Ltd., blue bricks; The Middleton Fire Clay Works, glazed bricks; Redpath, Brown & Co., Ltd., structural steel; Caxton Floors, Ltd., fireproof construction; J. H. Sankey and Sons, Ltd., moler slabs; Rheocrete Pumice Stone Slab Co., Ltd., pumice partition blocks; T. and W. Farmiloe, Ltd., glass; Luxfer Prism Syndicate, Ltd., patent glazing; Hollis Bros. & Co., Ltd., parquet and wood-block flooring; Asbestos Cement Building Products, Ltd., "Decolite" floors to service portions of flats; H. J. Cash & Co., Ltd., central heating, gas-fitting, boilers, electric wiring, electric light fixtures, electric heating and ventilation, bells and telephones; John R. Venning & Co., Ltd., John Bolding and Sons, W. N. Froy and Sons, Ltd., and Leeds Fireclay Co., Ltd., sanitary fittings; Rhodes Chains, Ltd., chains and pulleys and window furniture; H. and C. Davis & Co., Ltd., iron staircases; George Rome & Co., Ltd., and George Jackson and Sons, Ltd., decorative plaster; Starkie, Gardiner, Ltd., and J. M. Pirie & Co., Ltd., metalwork; J. Whitehead and Sons, Ltd., Anselm Odling and Sons, Ltd., and Charles Walker & Co., marble; Carter & Co., Ltd., and Martin Van Straaten & Co., tiling; Heal and Son, Ltd., furniture; Waygood-Otis, Ltd., lifts.

Portman Flats (pages 92, 93 and 99). General contractors, Higgs and Hill, Ltd. Sub-contractors: South Western Stone Co., stonework; Blunt and Wray, Ltd., ironwork; Plastering, Ltd., plastering stuc; Crittall Manufacturing Co., Ltd., metal windows; Ragusa Asphalte Paving Co., Ltd., asphalt; Shaw's Glazed Brick Co., Ltd., terra-cotta; Young, Austen and Young, heating, hot and cold supplies; F. Braby & Co., Ltd., Eclipse pressed steel stairs; London Brick Co. and Forders, Ltd., bricks; Waygood-Otis, Ltd., lifts; Electrolux, Ltd., refrigerators; Portland Cement Selling and Distributing Co., Ltd., Holborough cement; A. Goldstein & Co., glazing; Caxton Floors Ltd., floors; Dorman Long & Co., Ltd., steelwork.

Chiltern Court, Baker Street, W.1 (pages 94, 95 and 100). Clerk of works, W. E. Fennemore; general foreman, J. Corfield. General contractors, Higgs and Hill, Ltd., who were also responsible for the demolition, excavations and foundations. Sub-contractors: S. W. Stone Co., Portland stone; Moreland, Hayne & Co., Ltd., structural steel; Vertigan & Co., oak wood block flooring; Hollis Bros. & Co. Ltd., pine wood block flooring; Dent and Hellyer, Ltd., plumbing, sanitary fittings, w.c. suites and staff lavatories, etc., kitchen suites and plumbing; Crittall Mfg. Co., Ltd., steel casements; Art Pavements and Decorations, Ltd., Anselm Odling and Sons, Ltd., Marbello, Ltd., G. Wright, and Marble Decorations, Ltd., marble work; Benham and Sons, heating and ventilation, kitchen cooking apparatus and boilers; The British Challenge Glazing Co., laylights, dome lights, copperlike glazing and lantern lights; F. Braby & Co., Ltd., letter chutes; A. Brown & Co., Carter and Aynsley, Ltd., R. Adams & Co. (Floor Springs), London Metal Warehouses, Ltd. (Firth Staybrite), and James Gibbons, Ltd., ironmongery; Medway's Safety Lift Co., lifts and ash hoist; Metro-Vick Supplies, Ltd., electric light fittings; F. A. Norris & Co., fire escape staircases; Plastering, Ltd., Plaster Decorations, Ltd., and G. Jackson and Sons, Ltd., fibrous plaster and stucco; Caxton Floors, Ltd., fireproof floors; Compactom, Ltd., medicine cabinets and ladies' cloakroom fittings; Hitchins & Co., laminated doors; Mather and Platt, Ltd., tanks; Docker Bros., Induroleum flooring and paints; Emerson and Norris, Ltd., artificial stone; Gas Light and Coke Co., gas supplies; Luxfer Prism Syndicate, Ltd., pavement lights; Charles Henshaw and Son, entrance door grilles; J. H. Sankey & Co., partition blocks; The Art Pavements and Decorations, Ltd., floor tiles to booking hall; Henry Richards Tile Co., bathroom fitments; F. Sage & Co., and G. Parnall & Co., shop fronts; Merchant Trading Co., doors; Brookes, Ltd., granite; G. A. Harvey & Co., and Art Metal Construction Co., steel lockers; K. F. M. Engineering Co., and Pollards, Ltd., illuminated signs; Marble Art and Allied Craft, Macinlop, Ltd., and Leyland and Birmingham Rubber Co., Ltd., rubber flooring; James Walker, wood carving; Kenan, Ltd., Maple and Sons, Whiteleys, Ltd., and Druce & Co., Ltd., furnishings.

Flats, 42 Upper Brook Street (pages 96, 97 and 101). General contractor, Gee, Walker and Slater, Ltd. Sub-contractors: London Brick Co. and Forders, Ltd., flettons; St. Albans Brick Co., facings; Caxton Floors Ltd., fireproof construction; Gas Light and Coke Co., Ltd., gasfitting; Anselm Odling and Sons, Ltd., stairtreads and marble floors; Battiscombe and Harris, decorative plaster; Morris Singer Co., Ltd., metalwork; Bratt Colbran & Co., marble in bathrooms; Fenning & Co., Ltd., marble fireplaces.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Croydon Corporation has arranged to carry out a sewerage scheme for districts at ADDINGTON and SANDERSTEAD, at a cost of £33,200.

The BARKING U.D.C. has approved a scheme for the extension of the Park modern school premises, at an estimated cost of £4,000.

The BARKING U.D.C. has approved an amended scheme for the construction of a swimming bath in Longbridge Park, at a cost of £14,300.

Plans passed by the BARKING U.D.C.: Alterations to can-filling shed, West Bank, for Messrs. Russian Oil Products, Ltd.; extension to timber store, Abbey Road, for Messrs. Austins (East Ham), Ltd.; alterations and additions, the Barking Town Working Men's Club, North Street; alterations, 81 Axe Street, for Mr. C. Jackson Cole; covered yard, Hertford Road, for Messrs. Drysters, Ltd.; two houses, Suffolk Road, for Mr. J. A. Gaffy.

The Middlesex Education Committee has acquired a site in Bacon Lane, KINGSBURY, for the erection of a secondary school, and also a site at FINCHLEY for the erection of a junior technical school.

The L.M. & S. Railway Co. is to promote a Bill for the construction of a new railway from the junction of the FOREST GATE branch, proceeding in a southerly direction across land belonging to the Gas Light and Coke Co., and west of Hertford Road, across London Road by a viaduct, to the docks.

The Middlesex Education Committee is to acquire sites at HENDON for the erection of two secondary schools.

The Middlesex Education Committee is to prepare extension schemes for the Stationers' School and the High School, HORNSEY.

Plans have been prepared by Mr. G. Alan Fortescue, A.R.I.B.A., for a new branch for Messrs. Lloyds Bank, Ltd., KENTISH TOWN Road, N.W.; addition to stainless steel factory, THORNTON HEATH, Surrey; and an all-night service garage, BRONDESBURY.

The Surrey Education Committee has approved plans for the erection of a Roman Catholic school for 200 children at Raynes Park, MERTON.

The MIDDLESEX Education Committee has prepared a three-year school building programme, at a cost of £954,500.

The Surrey Education Committee has approved plans for extensions at the Fortescue School, MITCHAM, at a cost of £5,000.

The Surrey Education Committee is preparing plans for the erection of an elementary school near Green Lane, MORDEN.

The Surrey Education Committee has acquired a site off Pasthouse Common, RICHMOND, for the erection of a secondary school for boys.

The Surrey Education Committee has promised to consider the provision of a secondary school for SANDERSTEAD.

The WIMBLEDON Corporation has adopted the scheme for the development of Holland Gardens by the provision of three hard tennis-courts, a putting green, etc., and plans of the groundkeeper's cottage and conveniences, at a cost of £8,000.

Plans passed by the WIMBLEDON Corporation: Extensions, Oakhill School, Edge Hill, for Mr. T. Roker; six shops, Durnsford Road, for Messrs. G. W. Beattie, Ltd.; engineers' workshop, Messrs. Hugh Stevenson's Works, Riverside Road, for Mr. H. G. Robinson; alterations to billiard hall, 56 Merton High Street, for Messrs. G. Spencer & Co.; four houses, Dunstall Road, for Mr. A. M. L. McKay; house, Dunstall Road, for Mr. S. Derwent; office, Railway Station yard, Wimbledon, for Mr. A. M. L. McKay; house, Bathgate Road, for Mr. J. S. Brocklesby; addition to offices, Deburgh Road and Wandle Bank, for Messrs. Huntley and Sparks; house, Wool Road, for Mr. A. J. Styles.

SOUTHERN COUNTIES

Plans for the erection of a social centre and hall for the blind at BOURNEMOUTH have been prepared by Messrs. Hawker, Mountain and Bailey, architects.

The BOURNEMOUTH Education Committee has passed revised plans for the erection of an assembly hall, gymnasium, laboratories, domestic science rooms, etc., at the Bournemouth School for Girls.

The Managers of the BOURNEMOUTH Church of Egland Schools are considering the question of their providing one or more senior schools.

The BRIGHTON Corporation is seeking Parliamentary powers for the construction of waterworks.

The GUILDFORD Corporation Housing Committee has considered the request of the Health Committee to provide houses at low rents for the tenants of houses which the Health Committee proposes to close as unfit for human habitation, and has decided to view sites for the erection of such houses.

The GUILDFORD Corporation Housing Committee is to invite tenders for the erection of an additional forty-four houses at Stoughton recreation ground.

Plans passed by the GUILDFORD Corporation: Mortuary and V.D. department, Royal Surrey County Hospital, for the hospital committee; extension of generating station, Woodbridge Road, for the Corporation; workshop, Worplesdon Road, for Mr. R. E. Gash; garage, Woodbridge, for the Joint Hospital Board; shops, Worplesdon Road, for Mr. R. C. Whitemore; shops and offices, Woodbridge Road, for Mr. H. J. Foot; alterations and garages, "Oak Lodge," London Road, for Messrs. Crowe, Bates and Weekes; enlargement to accommodate 300 children, Ludlow Road schools, for the managers of St. Nicolas' school.

The NEWBURY Corporation has authorized the town clerk to make inquiries as to the possible acquisition of two sites in the borough, which it is estimated would together provide accommodation for the erection of 100 houses.

EASTERN COUNTIES

The CHELMSFORD Corporation is asking the L.N.E.R. to widen the railway bridge over New Street.

Plans passed by the CHELMSFORD Corporation: Additions, stairs, Market Road, for Eastern Garage, Ltd.; four houses, Lynmouth Avenue, for Mr. W. J. Wade; alterations and additions, shop premises, King's Road, for Chelmsford Co-operative Society; extensions, 91 High Street, for Mr. J. Dutton; Masonic headquarters, billiards room, bedrooms, etc., County Hotel, Rainsford Road, for Mrs. Butt's executors; extensions, Broadcast Research Buildings, Marconi Street for Marconi's Wireless Telegraph Co., Ltd.

SOUTH-WESTERN COUNTIES

The PAIGNTON U.D.C. has invited Mr. E. H. Ladbury to submit plans for a proposed public shelter and public conveniences at Preston Green.

MIDLAND COUNTIES

The BIRMINGHAM Corporation has leased land at Uplands and Oxhill Roads to Lady Reynolds, for the purpose of erecting twenty-five houses.

The Worcestershire C.C. has obtained land for the proposed reconstruction of Hampton Bridge, EVESHAM.

Of the 2,028 houses completed in the Borough of SMETHWICK, 498 have been built by direct labour. Arrangements are being made for the erection of a further 98 houses by direct labour, in addition to the 54 now in course of erection.

The Stoke-on-Trent Corporation has obtained sanction to borrow £21,000 for the erection of sixty-one houses on the Vivian estate, FENTON.

The Worcestershire Education Committee is seeking a loan for the purchase of a site at PERSHORE, for the erection of a senior school.

The Worcestershire Education Committee is to erect an elementary school for 800 at HALESOWEN, and has also prepared preliminary plans for improvements at the Council school at SIDEMOOR.

The Notts C.C. is to widen the bridge over the canal at TROWELL, at a cost of £5,000.

NORTHERN COUNTIES

The BARNSLEY Education Committee is seeking sanction to borrow £6,500 for extensions at the Grammar School.

The BARNSLEY Corporation has obtained sanction to borrow £69,660 for the erection of the new technical college.

Plans passed by the BARNSLEY Corporation: Eight houses, Carlton Road, for Messrs. H. and R. L. Potter; shop, Church Street, for Barnsley Chronicle, Ltd.; four shops, Market Hill, for Barnsley Arcade Co.; extensions, factory, Peel Street, for Messrs. T. Taylor and Sons, Ltd.; additions, Empire Mill, Stocks Lane, for Messrs. William Sugden and Son.

The BARNSLEY Corporation is discussing with the Ministry of Health proposals for the erection of a new laundry, the erection of a new block, and the extension of the administrative buildings at the sanatorium.

The BARNSLEY borough engineer has prepared revised plans for the erection of a welfare centre.

THE BLYTH Education Committee has included in the school programme provision of a central school and a department for infants at Princess Louise Road School.

The BOLTON Corporation has instructed Messrs. Bradshaw, Gass and Hope, the architects, to proceed with the preparation of bills of quantities, etc., so that tenders may be obtained for the town hall alterations, and extensions to the municipal buildings.





House, Luttrell Road, Four Oaks, Sutton Coldfield. Designed by Francis W. B. Yorke. The main front (left) and the garden side (right). The walls are of rustic bricks, with stone dressings; and steel casement windows have been fitted. The roof is covered with tiles. For ground floor plan, see page 109.

The BOLTON Corporation is acquiring approximately twenty-two acres of land at Lever Edge Lane for a housing scheme.

Plans passed by the BOLTON Corporation: Clubroom, Shepherd Cross Street, for United Sports Club; workshop and stores, Craddock Lane sidings, for Messrs. McCreath Taylor & Co.; house, Old Kiln Lane, for Mr. Paul D. Vincent; two houses, Regent Street, for Mr. W. Reddyhough; bungalow, New Church Road, for Mr. J. W. Noble; additions, Arkwright Street, for Direct Supply Co., Ltd.; extensions, Hill Mill, Temple Road, for Mr. Henry Crossley.

Mr. J. B. Walmsley is to develop the land in Blackburn Road, CHORLEY.

The CHORLEY Corporation has appointed a Baths Committee to take into consideration the question of the provision of public baths.

The HULL Education Committee has approved preliminary plans for the erection of one department of a school on the Bricknell Avenue site, providing accommodation for 400 junior and infant children.

The HULL Education Committee has passed plans for the erection of two departments of a school on the Pickering Road site for 400 junior and infant children in one department, and for 480 senior mixed children in the other department. Plans have also been approved for the erection of two departments of a school on the housing estate, Willerby Road, with accommodation for 400 juniors and infants, and 480 senior mixed children.

The HULL Brewery Co., Ltd., is to rebuild the Station Hotel on a new site in the vicinity of Paragon railway station.

The HULL Corporation Telephones Committee has obtained a site in West Lane, Hedon, for the erection of a sub-exchange. Tenders are to be invited.

Plans passed by the HULL Corporation: House, Cranbrook Avenue, for Mr. W. Close; two houses, Silverdale Road, for Mr. J. Taylor; four houses, Hall Road, for Mr. P. Buckle; four houses, Bricknell Avenue, for Mr. T. R. Barnett; two houses, Inglemire Lane, for Mr. H. Wilkinson; two houses, Bricknell Avenue, for Mr. H. Sanderson; offices, etc., Hessle Road, for the Corporation; ten houses, Inglemire Lane, for Mr. H. Wilkinson; fourteen houses, Gillshill Road, for Mr. R. Ashton; ten houses, Street No. 14, for Messrs. G. T. Spruit and Son; six houses, Waldegrave Avenue, for Mr. W. H. Dowell; house, Gillshill Road, for Mr. S. Bays; house, The Avenue, for Messrs. F. Sewell and Son.

At a meeting of the HULL Education Committee, the director submitted proposals for the erection of new premises for the accommodation of the Riley High School on a site in Cottingham Road. The Committee authorized the preparation of preliminary plans for the erection of the premises, with accommodation for 500 pupils.

The HULL Watch Committee has passed plans submitted by the owners of the Strand Picture House, for structural alterations to the building.

The LEEDS Corporation has sold a building site at the junction of Merrion Street and New Briggate to Phonophones, Ltd., for the sum of £5,000.

The LEEDS Corporation has appointed a Committee to consider the suggested utilization for branch library purposes of the Headingley, Sheepscar and Woodhouse Moor police stations.

The LEEDS Corporation is seeking sanction to borrow £48,000 for the reconstruction and renewal of Sheepscar, Stainburn Square and Kirkstall Road gasholders.

The LEEDS Corporation Parks Committee has approved the sketch plan submitted by the city engineer, of the proposed crematorium, chapels, cloister, etc., on the Cottingley Hall Estate, Elland Road.

It is stated that a site at the corner of Lime Street and Elliott Street, LIVERPOOL, is being prepared for the erection of a new cinema for Associated British Cinemas, Ltd. The estimated cost of construction and equipment is £200,000.

Provision for the building of eight new bridges and a viaduct, together with street improvements, at a cost of £800,000, is one of the features of a Bill shortly to be introduced into Parliament by the MANCHESTER City Corporation.

The OTLEY Urban Council is proceeding with a scheme for the erection of a hundred houses on the Westbourne Park estate, at the west end of the town. The Council has provisionally accepted a tender of £31,063 for the erection of the houses.

The RETFORD Town Council has adopted a recommendation of the Housing Committee to build twenty-eight houses on Leafield Road, Hallcroft Estate, Retford.

A block of property in RICHMOND, Yorks, for the erection of a cinema, dance hall with café, and an arcade of shops, to extend from Victoria Road to Newbiggin, has recently been purchased by a syndicate.

The RIPON Corporation has passed plans for extensions at the Diocesan training college.

THE RIPON Corporation is seeking sanction for a loan of £17,000 for the erection of houses on the Aismunderby estate.

At a meeting of the RIPON Corporation Housing Committee, the city engineer reported on his interview with the Ministry of Health officials as to the erection of a further forty-four houses. The question of erecting a different type of house was discussed, and the city engineer was asked to submit an alternative design.

The ROTHERHAM Corporation is to secure powers for the construction of a weir across the river Don.

The ROTHERHAM Corporation Gas Committee has approved the plans and estimate of £23,000 for the conversion of the present gas offices and adjoining buildings into new offices, shops, showrooms and workshops.

Plans passed by the ROTHERHAM Corporation: Steel framed building, Alsing Road, Meadowhall, for Messrs. Howell & Co., Ltd.; ten houses, Ledsham Road, for Mr. G. Bilton; four garages, Psalters Lane, for Mr. P. Wood.

The ROTHERHAM Corporation Housing Committee has decided to erect approximately seventy houses by direct labour at South Street, and has instructed the borough engineer to submit an estimate of the cost per house.

The SHIPLEY U.D.C. has had under further consideration the question of the provision of new public offices. The clerk has been instructed to submit the proposals in draft form to the Unemployment Grants Committee, with a view to ascertaining whether the Committee would be prepared to make a grant towards the cost of the building, if the Council decided to proceed with the scheme.

The TYNEMOUTH Corporation Baths Committee has asked the borough surveyor to prepare plans for baths and washhouses at the corner of Union Street and Church Way.

The WAKEFIELD Corporation has decided to erect fifty houses, by direct labour, on the Lupset estate.

The WAKEFIELD Education Committee has decided to proceed with a scheme for the provision of an open-air school.

The WAKEFIELD Corporation has decided to erect a further 150 houses on the Eastmoor estate.

The WAKEFIELD Corporation recommends proceeding with the scheme for the erection of a new bridge at Kirkgate.

At a meeting of the WAKEFIELD Corporation the architect submitted a scheme for the utilization of Snapethorpe Hall, and instructions were given for the scheme to be referred to the General Purposes Committee.

Plans passed by the WAKEFIELD Corporation: Alterations, Redoubt Inn, Horbury Road, for Messrs. J. Tetley and Sons, Ltd.; three garages, Old Crown Yard, for Mr. A. Hampshire Lee; house, Horbury Road, for Mr. H. Dobson; shop, Kirkgate, for Messrs. H. Pickles and Son, Ltd.; four houses, Flanshaw Lane, for Mr. J. P. Firth; addition to boiler house, Christ Church schools, Thornes Lane, for Messrs. W. Wrigley and Son.

At a meeting of the YORK Corporation Estates Committee, it was reported that the city engineer has prepared preliminary plans of a public hall, and the Committee is considering the many questions which arise before it can report to the Council.

The YORK Education Committee has obtained sanction to borrow £12,000 for the erection of an elementary school at Tang Hall, and has also obtained sanction for a loan of £43,500 for the erection of 111 houses on the Tang Hall estate.

Plans passed by the YORK Corporation: New premises, Balfour Street, for Leeman Road W.M. Club; alterations, 83 Walmgate, for York Equitable Industrial Society, Ltd.; additions, Lawrence Lane, for the managers of St. Lawrence's School; loud speaker house, New Street, for Tower Picture Co., Ltd.; additions, Portland Street, for the governors of Bootham School; two houses, Millfield Lane, for Mr. J. Kilmartin; two houses, Winchester Grove, for Messrs. W. E. Puckering & Co.; additions, Coney Street, for Yorkshire Herald Newspaper Co., Ltd.; additions, Museum Chambers, for Mr. J. Pulleyn; additions, 5 and 5A Coney Street, for Messrs. J. B. Inglis and Sons; eight houses, Cornborough Avenue, for Mr. A. Temple; layout of estate, Acomb, for Mr. J. S. Barlow; house and shop, Manor Drive, for Mr. W. H. Edward; new road, Shipton Road, for Clifton Estate, Ltd.; four houses, Muncaster House Estate, for Mr. Denby Collins; twelve houses, Carr Lane, for Messrs. Simpson Bros.; sixteen houses, Manor Drive, Poppleton Road, for Mr. J. Sawdon; six houses, Moor Lane, Bishopthorpe, for Mr. W. J. Simpson.

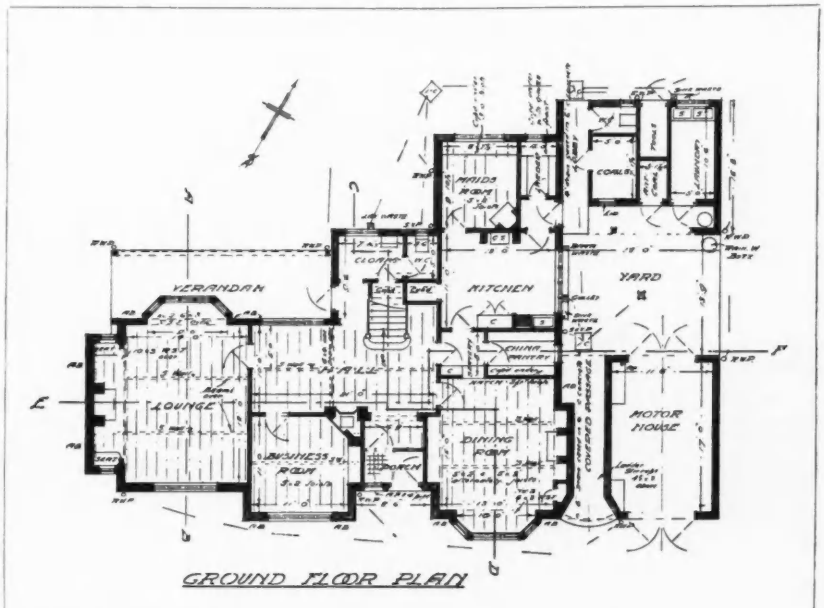
SCOTLAND

The FALKIRK Dean of Guild Court has granted a warrant to British Cinemas, Ltd., for the conversion of the Grand into a talkie house. The reconstruction scheme will cost £12,000 and accommodation for 2,000 persons will be provided.

MISCELLANEOUS

Mr. M. Levy is to erect shops and flats on the site of 243, 247 and 249 Hanover Street, CAPE TOWN.

The Citizens Housing League Utility Co. of CAPE TOWN has prepared a scheme for housing at Maitland at a cost of £100,000.



House, Four Oaks, Sutton Coldfield.] [*Designed by Francis W. B. Yorke.*

Ground-floor plan. The hall beyond the porch gives on to the lounge, business-room, dining-room and kitchen. The dining-room is panelled in oak; a notable feature is the incorporation of the sideboard and silver cupboards in the panelling. On the first floor are five bedrooms, a bathroom and a storeroom.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_2	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_2	Chatham ..	S. Counties	1 5	1 0½
B_2	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A_1	Durham ..	N.E. Coast	1 7	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_1*	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B*	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1 3 0	*Trailer*	£0 15 0
3-ton motor lorry	3 15 0	*Steam roller*	4 5 0
Steam lorry, 5-ton	4 0 0	*Water cart*	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	1 17 6
DO. 6-2-1, per yd. cube	1 12 6
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 14 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0 4 3
DO. 6 in., per ft.	0 5 0
DO. 9 in., per ft.	0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 8 3
DO. 6 in., per ft.	0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4 5 6
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9½ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 5 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32 0 0
DO. in cement do., per rod	34 10 0
DO. in stocks, add 25 per cent. per rod.	
DO. in blues, add 100 per cent. per rod.	
DO. circular on plan, add 12½ per cent. per rod.	
DO. in backing to masonry, add 12½ per cent. per rod.	
DO. in raising on old walls, etc., add 12½ per cent. per rod.	
DO. in underpinning, add 20 per cent. per rod.	
HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side, per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in., per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	
HOISTING and setting stone, per ft. cube	£0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.	
PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 3
DO. 2½ in. thick, per ft. sup.	0 1 6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:	
Portmadoc Ladies	£14 0 0
Countess	23 0 0
Duchess	32 10 0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8 3 9
Grey-green do., per ton	7 3 9
Green peggies, 12 in. to 8 in. long, per ton	5 13 9
In 4-ton truck loads, delivered Nine Elms station.	
Clips, lead, per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 2 2
Cement and sand, see "Excavator," etc., above.	
Hand-made tiles, per M.	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
DO. *Peggies, per ton*	7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	*Med. Green*
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6 7 0	
Grey-green do.	5 9 0	
Green peggies. 12 in. to 8 in. long	4 13 6	

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3 17 6
DO., machine-made do., per square	3 7 6
Vertical Tiling, including pointing, add 18s. 0d. per square.	
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):	
7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 4 6
DO. *T. and G., 1 in., per sq.*	1 4 6
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 6
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 2
DO., *ft. cube*	0 14 0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 4 6
DO. framed in floors, roofs, etc., per ft. cube	0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube	0 8 6
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
DO. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. 4 *in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. 3 *in., per yd.*	0	1	8
DO. 4 *in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. 4 *in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. 4 *ft. sup.* ,,	0	2	3
DO. 6 *ft. sup.* ,,	0	2	6
DO. 20 *ft. sup.* ,,	0	3	1
DO. 45 *ft. sup.* ,,	0	3	3
DO. 65 *ft. sup.* ,,	0	3	5
DO. 100 *ft. sup.* ,,	6	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. ¼ *in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz. per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Sing'e gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

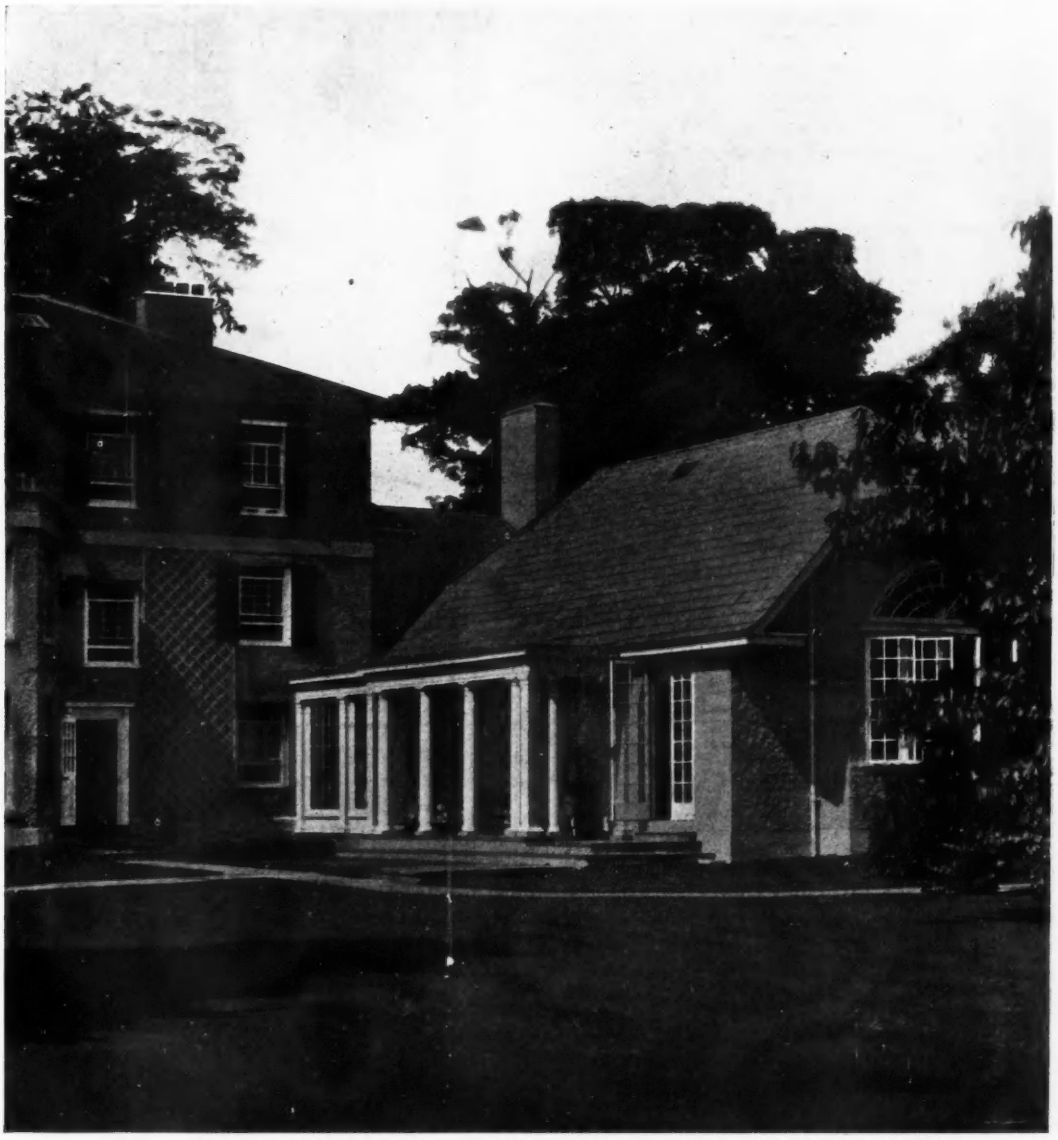
SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards. plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	1/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—

MARGINALIA: No. 3



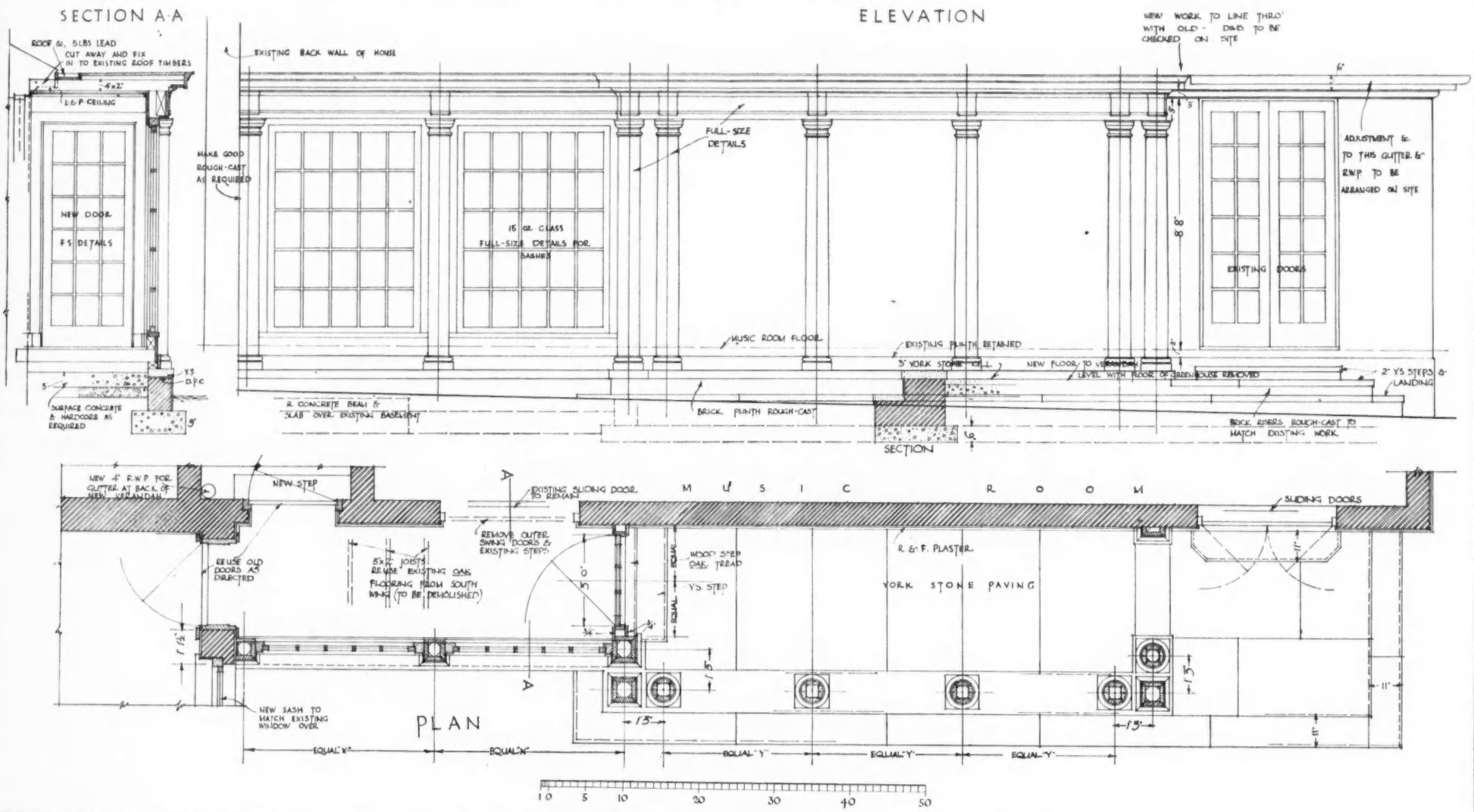
NEW VERANDAH LEADING TO MUSIC ROOM: GODSTONE PLACE, SURREY.
By C. H. JAMES.

GODSTONE PLACE was originally an early-eighteenth-century house with a steep tiled roof, as a water-colour of about 1800, in the possession of the owner, clearly shows. Some time during the nineteenth century a third story was added, with low-pitched slate roof, and in 1901 further alterations were made which completely destroyed its original character. A little later a large music-room was built at a short distance from the house, to which it was linked by a hideous half-octagonal conservatory. Three years ago the present owners decided to endeavour to restore some of the original character to the house, and the whole of the 1901 additions were pulled down, as well as the octagonal conservatory.

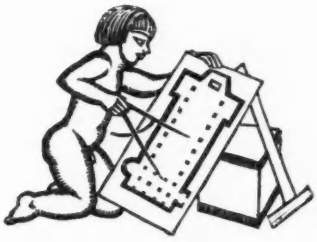
The loggia illustrated was thought to be the most satisfactory way of linking the house to the music-room. It was obvious that the design had to be in accordance with tradition, but the structure being of wood, the Doric columns were made ten diameters high and the entablature is considerably reduced from the conventional pattern. The columns are built up of silver spruce. They have the normal entasis, but the corner posts and the pilasters are parallel. Plain triglyphs, slightly projecting, give relief to the frieze. For detail drawing see overleaf.

ALTERATIONS AT GODSTONE PLACE SURREY — DETAILS

NEW VERANDAH TO MUSIC ROOM



(A photograph of this detail is reproduced on the preceding page.)



WEDNESDAY, JANUARY 15, 1930

THE TIGER AMONG THE GOOSEBERRY BUSHES

"It was as though a tiger had sprung at him from among his own gooseberry bushes, for a newly finished building of his had fallen down."

—JAGO *v.* SWILLERTON AND TOOMER,
by KARSHISH, Part i.

IN some of the most engaging verses ever written Mr. Kipling told us the difference between "Children of Mary and Children of Martha." The latter, according to the poet, are the workers and the drivers of mechanical devices, and clean up the mess of the world, and make the way smooth for the Children of Mary to walk through dry-shod and star-gazing.

So far as the profession of architect is concerned, the idea that mankind is divided between dreamers and engineers constitutes a fallacy worthy of the late Mr. Geoffrey Scott's attack; for the architect belongs to both types. It is that which constitutes his special character. His work is not only the equivalent of seeing "that the clutch engages" with the Marthians, but also the equivalent of seeing with the Marians "the light that never was on land or sea." And the latter task is the more difficult, and needs the greater knowledge and concentration, and the deeper thought.

It is no wonder therefore that the architect is liable to make mistakes. He knows that he probably has never carried out a single work without some error of judgment, or without having to be responsible for someone else's inferior method. But these things he expects and does all he can to discount and forestall and make amends for. It is the further liability of being suddenly and unexpectedly overwhelmed by a great catastrophe which makes his life like that of a child in some gloomy household where Hell is a bright reality under a crust of righteousness so thin that it may at any time give way and let the soul half-way down to Tophet. Or to take the simile used by Karshish last week in his account of an arbitration case, the relation of which is continued in another column, at any moment the architect may be mauled by a tiger springing out of his own familiar gooseberry bushes.

The cruel and abnormal tempests of this winter have waked many of such tigers. But even without storm and tempest one such experience at least will come to almost every man in the profession, and teach him of the tiger in the gooseberry bushes. Once bit he will be twice shy of various things; and he will learn thoroughly all the "little things that matter" of which Mr. Edwin Gunn has written so admirably.

And there are worse things that happen. Perhaps he has designed a water-tank on the principle of rigid body statics, instead of on a basis of strain energy. If so, such a tank may burst and drown some innocent person, as has happened before. Or perhaps he has put up a boom which is not resilient, but in which the tensional members may take up compressive stresses and fall. Or, an even simpler case, his handrails may be too low and some careless person, slipping on the stair, fall into the stair-well and be killed. How then is the profession to avoid these shocking happenings? We fear that the practice of Architecture will never be fool-proof; but at least here is Karshish to help us to a vivid realization of the dangers.

Mankind is so constituted that a dull recital of duties or a monotonous iteration of warnings merely sends it to sleep. So Mr. Galsworthy gets us to improve the penal code by writing a play about it, just as Dickens abolished the debtors' prison by putting the hero of a picaresque novel into it. And in the same manner Karshish is going a long way towards curing the faults of architects and builders. He engages our attention; he distracts us from professional pride until he has us thoroughly interested—and off our guard, and then he suddenly makes us realize that we are all potential murderers—that it is we who by our negligence and errors of judgment have jeopardized the lives of immortal Irishmen like the O'Hara and of adorable Jane Porches, and have thinned the pockets of irascible but financially-sound clients like Colonel Jago.

(*A photograph of this detail is reproduced on the preceding page.*)



[*By Maurice Webb (Sir Aston Webb and Son)*

COMMERCIAL UNION ASSURANCE HEADQUARTERS: THE ENTRANCE HALL, WITH WAR MEMORIAL.

On entering from Cornhill, through the main doors seen on the right of this picture, the visitor receives an impression of space, light, and, particularly, of loftiness. For not only do the Corinthian pillars carry the eye upwards past the balcony that marks the mezzanine floor, but their bases are seen to rest upon a floor that, looking out over the balustrade, seen on the left, dominates the whole of the general office space, apparently by a good deal more than the three feet which is the actual difference in levels.

At the end of the hall to the right, on entering, is seen the war memorial, closing the vista here illustrated ; to the left, facing it, are a pair of passenger lifts. The memorial itself, a statue of quite modest proportions, was retrieved from the old building that collapsed in 1927, and has been re-set upon a pedestal in a niche specially designed. As a background, it has a stained glass panel, bearing the arms of the central and subsidiary companies, artificially lit from behind.

The bronze standard lamps are an essential feature in the scheme of decoration, which includes the inlaid design of the flooring, the fluting of the Ancaster stone pillars, and the carving of their capitals. The building is illustrated and described on pages 119-124.

NEWS & TOPICS



Recipient of a New Year knighthood: Sir Lawrence W. Chubb, Secretary of the Commons and Footpaths Preservation Society, and General Secretary of the National Playing Fields Association.

CHARING CROSS BRIDGE

IN the leading article in last week's issue the hope was expressed that this year there would be much liveliness on the architectural front. We have not had long to wait for evidence of this desired increase of militancy. That redoubtable architectural warrior, Sir Reginald Blomfield, has launched a new attack upon the official proposals for Charing Cross Bridge. In a closely-reasoned letter to *The Times* of January 10, he outlines an alternative scheme to form the new bridge and approaches, starting from a circus in the Strand, approximately opposite the south-east corner of the Charing Cross Hospital, and ending at a junction of Waterloo Road and York Road.

★

The advantages of this proposal are manifest. In the first place, it saves the whole of the immense cost of compensating the Southern Railway, Coutts's Bank, Gatti's Restaurant, the Old Vic, and other buildings. It saves all the new viaduct work, including the two objectionable tunnels. The bridge comes to ground on the Surrey side at the earliest opportunity, and it renders possible at a future date schemes for lowering the railway and placing the station underground. Sir Reginald's new bridge would provide a vista from the Strand right across the river, which would be of inestimable value at this point and, owing to the simplification of plan, and rectangulation of building sites, would offer the opportunities for architectural treatment lacking in the official scheme.

★

The last and exceedingly important point in favour of Sir Reginald Blomfield's suggestion is that the bridge and its approaches could be begun with the least possible delay. Probably not more than six months would be necessary to obtain the best design for the bridge in competition, and the whole work would be completed at probably one-third of the cost, and within one-third of the time, required for the official scheme. Sir Reginald Blomfield has done the only thing which was required to offer effective opposition to this latter, for he has produced an alternative which is practical, economical, and capable of being put into execution with the minimum of delay.

THE RELATIONSHIP OF SHOPS TO POPULATION

Dr. Raymond Unwin, in his lecture last week to the R.I.B.A. on Regional Planning and Greater London, gave some interesting figures showing the relationship of shops to population. In rural districts one shop for fifty persons is the average proportion. In large towns one for every one hundred persons is nearer, the shop being larger to cope with the increased shopping activity of urban dwellers. Similarly, if one grocer's shop would flourish among 1,000 head of population, a furniture dealer would do badly, and a sports dealer or a musical instrument store would fail for lack of custom, because the furniture dealer requires a population of 3,000 to keep him going, and either of the latter a population of from 10,000 to 15,000.

TOWN PLANNING OF BUILT-UP AREAS

Mr. W. Townend, reading a paper on Town Planning of Built-up Areas at the last meeting of the Surveyors' Institution, said that one of the greatest objections which can be urged against the application of existing town-planning law to built-up areas is that in far too many instances the final decision on points which may vitally affect the interests of owners is in the hands of the Ministry of Health. It seems certain that if the progress of schemes on unbuilt-upon land is slow, in view of the multiplicity of interests to be dealt with in built-up areas, the progress there will be still slower. For that reason legislation should be enacted only after the most careful consideration. There is serious danger both to the interests of the community and to property-owners and their tenants if the provisions of the Act of 1925 are merely to be adapted to a class of property for which they were never designed.

FLATS *v.* HOUSES

It seems more and more evident that the time is ripe for the re-development of towns. Which is to say, that having expanded the crudest interpretation of the garden-city idea over miles of defenceless country, we are led to see the wastefulness of these methods, and the need for making a fuller use of purely urban districts, many of which, antiquated and shoddy as they are now, present opportunities for new forms of development. These will follow the spirit of the L.C.C. type of flat-dwellings, or their more exalted counterpart, recently built over old property in Clapham, to the design of Messrs. Louis de Soissons and G. G. Wornum. Blocks of five- and six-story flats, beautifully built and standing in open grounds, quite possible owing to the economical use of ground, will turn the arid wastes of decaying stucco into well-ordered urbanity, in which lawns, flowers and trees will be found to have become an important factor. This is really no idle dream, but a distinct possibility.

BIRMINGHAM'S MILLIONS

Birmingham offers probably the best example of municipal ownership in the country. The conditions of the civic centre competition held a year ago proved less than usually onerous to competitors, because so much of the property falling within the radius of the scheme was already in the possession of the Corporation, and therefore free to be used for the most unrestricted form of development. Now comes news of a loan of nearly five million pounds on behalf of civic improvements, not in connection with the proposed civic centre, but for a variety of purposes, mainly housing, but including a new golf course, among sewerage, gas and water-supply schemes. This would point to a remarkable degree of confidence in the city's future, if one forgot for a moment the wisdom of so wide-spread a control over the growth of residential and other types of development, no matter what the future may bring.

ASTRAGAL

SIR LAWRENCE WEAVER: AN APPRECIATION

BY JOHN GLOAG

Sir Lawrence Weaver, whose lamented early death, from angina pectoris, after two days' illness, occurred in a nursing home on January 10, was born at Clifton, Bristol, in 1876, educated at Clifton College, and trained as an architect. He was twice married, and had two sons by his first wife, who was keenly interested in the Ashstead Potteries, and the training of ex-Service men in connection with this craft. Sir Lawrence was a valued contributor to this JOURNAL, *and the article printed elsewhere in this issue is one of two recently completed.*

IN this century it is not always possible to set a just value on a man's work and to estimate its significance to the world. A little bemused by historical memories, we are still prone to seek for our great ones, and sometimes to imagine that we find them, in the wordy, unreal world of politics; but some men, by the work they do, and the courage and inspiration they bring to its execution, leave no doubt in our minds regarding their worth to civilization; and great among such men was Sir Lawrence Weaver. By his death architecture loses a friend, and the cause of betterment in many branches of applied and industrial art is deprived of a practical champion.

His qualifications for advancing the interests of good planning and intelligent design were exceptional. His early training as an architect was followed by some fourteen years of experience in the administrative side of various manufacturing firms. In those years he recognized, as a manager and a director, the self-made difficulties that afflict British industry; he learned much concerning the artistic inhibitions of business men, and he created and perfected his technique of persuasiveness, which enabled him to deal so successfully with those respectably unimaginative occasions when boards or committees were strangling a new idea. Although he found commercial conservatism and other forms of stupidity intolerable, he realized that commerce and industry were seldom presented with intelligent reasons for improving their services and products. Speaking with the authority of a business man whose abilities were of a high order, he put the case to industry for the artist.

His work as a journalist and an author extended his influence, particularly in the architectural field. From 1910 to 1916 he was architectural editor of *Country Life*, and he was responsible for the publication of many finely-illustrated books which enlarged public interest in the traditional beauties of English building, and in such subjects as town-planning and house-planning. Books from his own pen included *Small Country Houses of To-day* (in two volumes); *Lutyens' Houses and Gardens*; an admirable history of English lead-



Sir Lawrence Weaver, K.B.E.
Born, 1876; Died, January 10, 1930

work; and a lucid and sympathetic study of Sir Christopher Wren

For Wren he had an unfading affection. He would talk of him as one talking of an intimate friend; and could give you an unforgettable picture of the architect of St. Paul's, so that thereafter Wren became for you a vivid character.

As a writer he had a vigorous style, saying what he had to say with a felicitous economy of words, and marshalling his thoughts in an orderly fashion. It was his gift for picking out instantly the salient points of any matter that made him a perfect chairman at a meeting; this gift, in alliance with his energy and his trained powers of persuasion, assured his success as an organizer. His ability to organize on a large scale was tested as Controller of Supplies (unpaid) in the Food Production Department in 1917. Following this post came other Government appointments, first Commercial Secretary to the Board of Agriculture, and then Director-General of the Land Department, and Second Secretary, Ministry of Agriculture, from 1919 to 1922. In 1920 he was created a Knight of the British Empire.

It was the British Empire Exhibition, and his appointment as director of United Kingdom exhibits (including the Palace of Arts) that brought all his powers and tastes into action simultaneously. It was followed some years later by another example of Weaver's effective liaison between designers and business interests, namely the Advertising Exhibition of 1927, in which the standard of design and display was unquestionably superior to that of any exhibition previously held in this country.

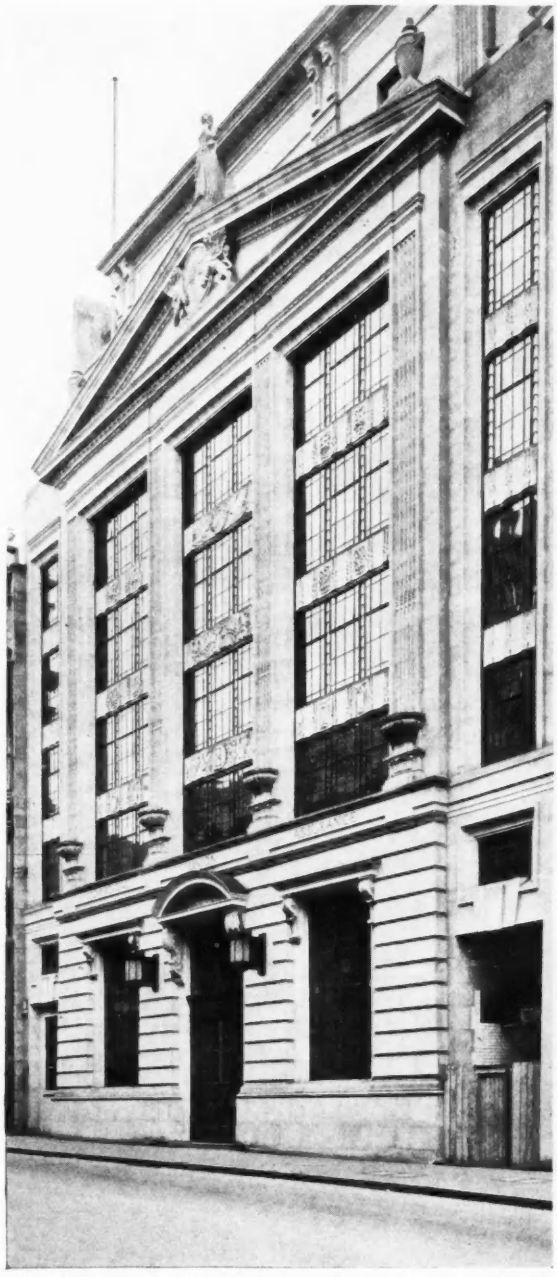
In 1925 he became a director of one of the largest advertising agencies, the London Press Exchange. But in spite of unceasing pressure of work, he found time to be president for four successive years of the Design and Industries Association, and when Mr. J. C. Squire retired in 1927 from the presidency of the Architecture Club, Weaver, who had been a most energetic member of the club since its inception in 1922, was elected its president. He could always find time to direct and inspire organizations that, in his view, were doing a good job of work, tidying up muddles or abolishing stupidities. He gave much time to the Ashstead Potteries, at which disabled men are trained to a craft. He was honorary treasurer of the Housing Association for Officers' Families, trustee of the Douglas Haig Memorial Homes, trustee of Chequers, and founder of the National Institute of Agricultural Botany.

One of his minor recreations illustrates the feeling he had for the work of the craftsman. He tried to keep one evening a week free, so that, in company with two old friends, he could retire to the attic of that pleasant house in Hamilton Terrace and there, under the instruction of an expert, practise the craft of bookbinding.

He has left the world better than he found it, for he had the courage of his good convictions, and the vigour and ability that could give them practical expression.



Prudence, with serpents, for wisdom, and a dove, for simplicity: the statue on the apex of the pediment (from a model).



The façade, to Cornhill, in Portland stone, is adorned with aprons spanning the windows, carved with emblems of the hazards of fire, life, and the sea, and with doors and other work in bronze. The sculptures, generally, are by Walter Gilbert, with whom has been associated his son Donald. The four vases are provided for flood-lighting.



One of the two vases, with the City's pigeons fluttering about them, sculptured for the sides of the pediment (from a model).

COMMERCIAL ASSURANCE

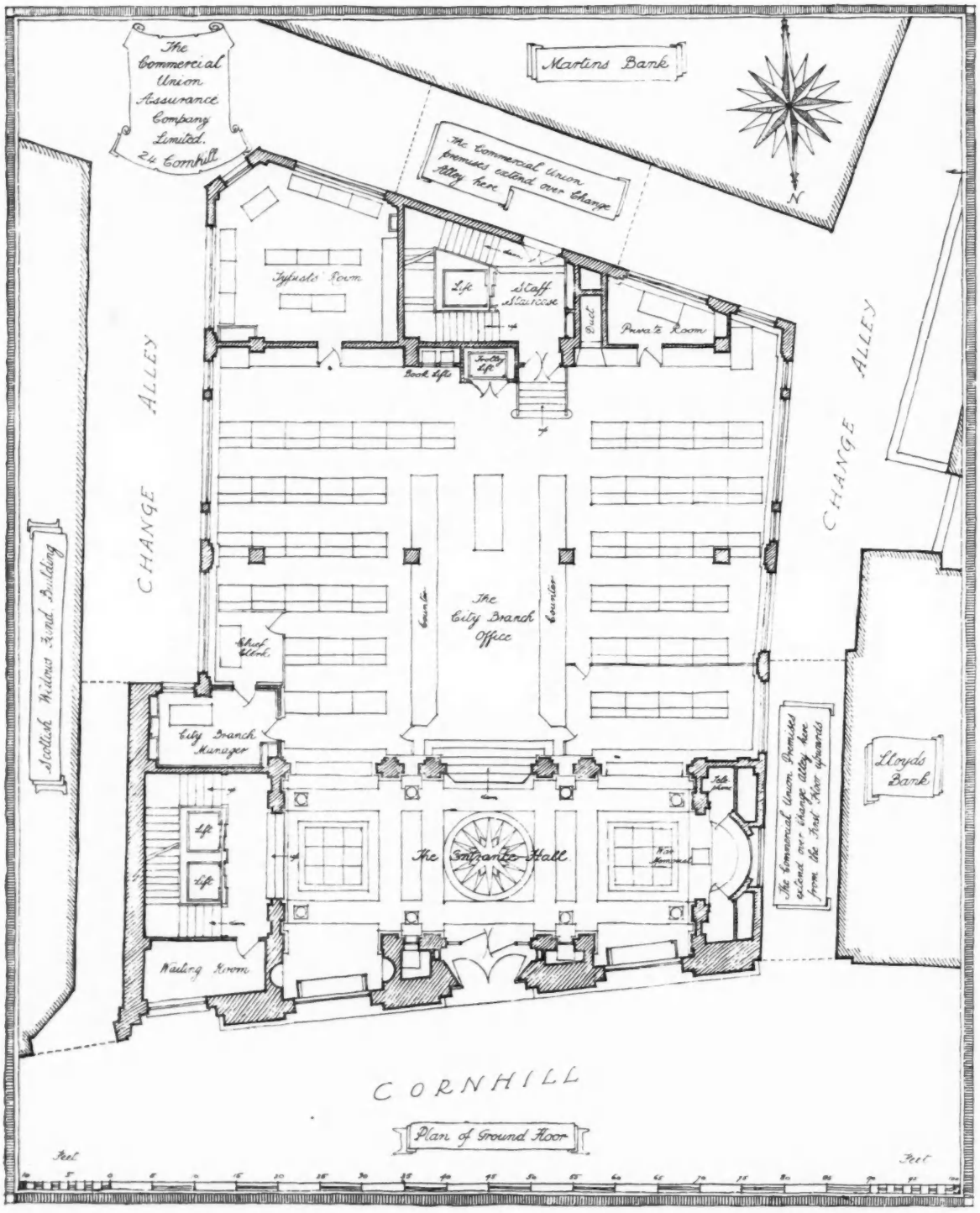
Cornhill, E.C.3.

DESIGNED BY
MAURICE WEBB
(Sir Aston Webb and Son)

FEW citizens of London remained indifferent to the sensational collapse of the old Commercial Union building in Cornhill in August, 1927, and most architects must have speculated as to what manner of work would take its place. The sequel has now appeared in a rebuilt headquarters that reflects in every detail the dominating idea of service. When Mr. Maurice Webb, of Sir Aston Webb and Son, was consulted, he found that in the old building very nearly twenty per cent. of the ground-floor space had been occupied by walls and piers. For the company, then, the necessity of rebuilding has really been a blessing in disguise, since it gives them far more space, so much stronger are modern materials in relation to their dimensions. In addition the powers that be agreed to a straightening of Change Alley, which runs between the site and that of the new Lloyds Bank, so that it was possible to work on a plan very nearly rectangular.

The steel-framed building, faced with Portland stone, enriched with bronze windows and doors, and affording four floors below ground and seven above, has been erected in the short space of twelve months. The façade to Cornhill has decorative sculptured work both in stone and in metal carried out by Mr. Walter Gilbert in association with his son Donald. Four vases contribute to the composition by day, and by night release flood-lighting for the whole of the principal front above the first floor. Animals emblematic of every country where the company carries on business are taken as motives of adornment in the bronze work.

The entrance hall is carried up through the mezzanine to the first floor, and the remainder of the large working space supplied by the ground floor is sunk some three feet below it. By these means an impression of dignity is secured, and at the same time the office becomes an unusually light one. The working staff occupies the floors immediately above, leaving the comparative seclusion and quiet of the top floors for the boardroom and managerial suites. There is a fine board luncheon-room and a roof garden in proximity. A particular effect is produced in the entrance hall by the tall standard lights which lead the eye towards the war memorial, transferred from the old building and now placed on a special pedestal with a rich

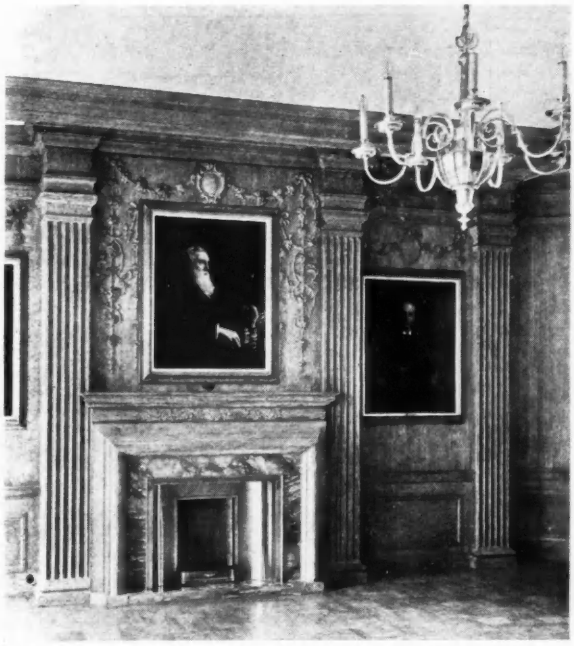


Commercial Union Assurance Offices, Cornhill, E.C.3. [*By Maurice Webb (Sir Aston Webb and Son).*

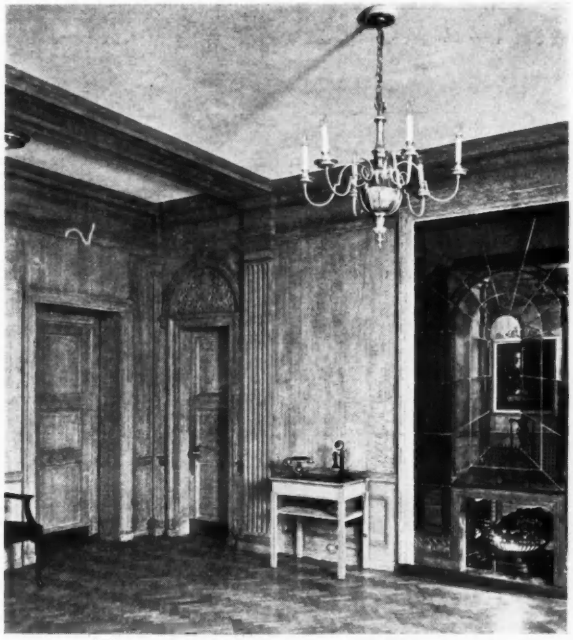
The architect's sketch plan of the ground floor. The general level is sunk about three feet below that of the entrance hall, an expedient that, besides having a psychological effect upon the entering visitor, has the practical one of securing an access of light, since the windows are carried to full height. Change Alley is spanned in places.

stained glass window in the niche behind, which is artificially lit. Wherever possible, materials of British or Empire origin have been employed; for instance, the boardroom suite is panelled in English oak, while Tasmanian oak is extensively used for flooring. Much of the office and lavatory fixtures are of teak from India, and tiles and bricks are British.

The heating installation is particularly interesting, since use is made of the electrical thermal storage system, by which current is taken from the mains during "off-load" hours.



Features illustrative of the careful detailing throughout the building are the fireplaces in the principal rooms. This one, in the board luncheon-room, on the sixth floor, is in Sienna marble. The panelling is in English oak, and the electrolier has a butter silver finish.



In the board ante-room of the directors' suite. The door seen on the left leads to the luncheon-room, that to its right, to the service room. The entrance to the board-room faces the mirror, in bronze and glass, above the recess, which houses an electric fire in a bronze bowl.

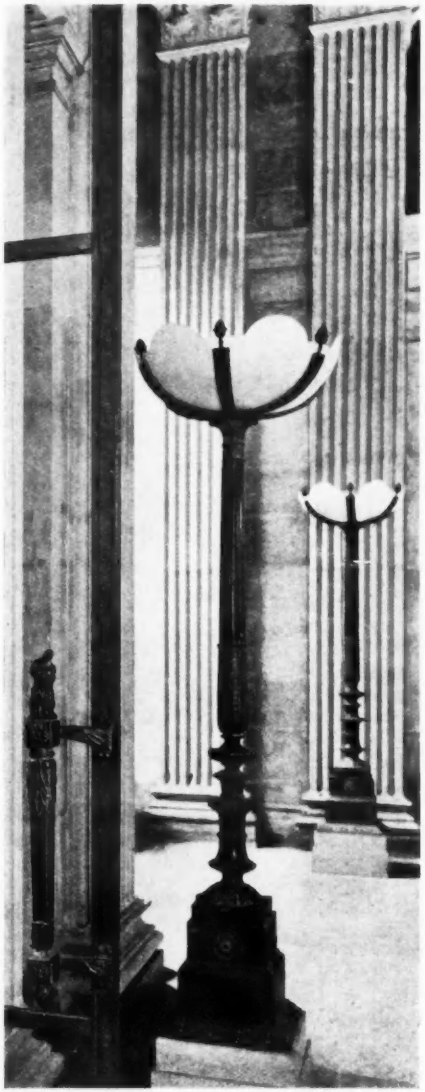


Commercial Union Assurance Offices, Cornhill, E.C.3. [*By Maurice Webb (Sir Aston Webb and Son).*

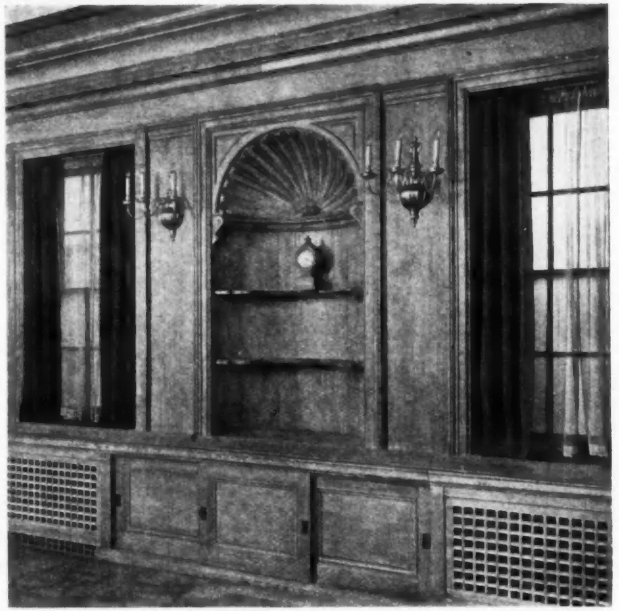
The board-room is panelled in English oak, into which portraits are framed. That shown, over the Ancaster stone fireplace, is of Roger Owen, a former chairman of the company. Lawrence A. Turner has been responsible for the carved enrichments: the coat of arms is coloured, and the lions are gilt.



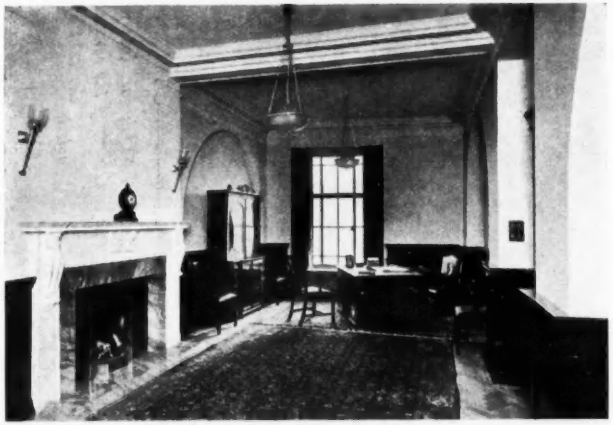
Corridor to the managerial suite of offices, on the fifth floor, looking towards the main staircase and lifts; both the skirting and the dado are in mahogany.



A near view of the bronze lamp standards in the main entrance hall. On the left is also seen a fragment of one of the bronze and glass inner doors, which are ornamented with small sculptured figures.



This sideboard is in the board luncheon-room, of which another view appears on the preceding page. The panelling is carried out in English oak, which is allocated to this suite.



The general manager's room. The fireplace is of pine, painted white, and Sienna marble. Mahogany is used for the joinery, in the managerial suite, and Tasmanian oak for the floor.

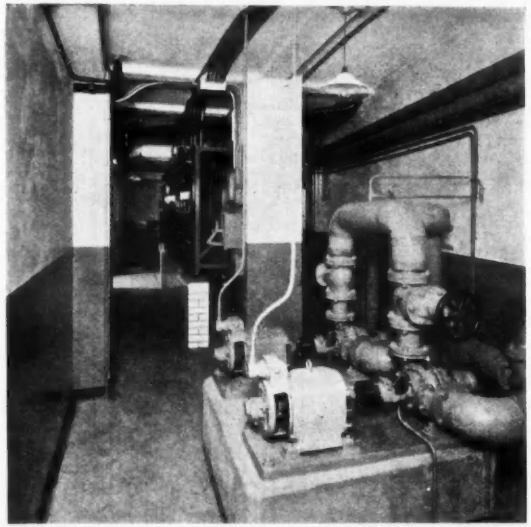


The general office of the life department, on the third floor. Here the furniture is of teak, the floor is covered with linoleum, and, as in other office spaces, the ceiling is finished with acoustic plaster.

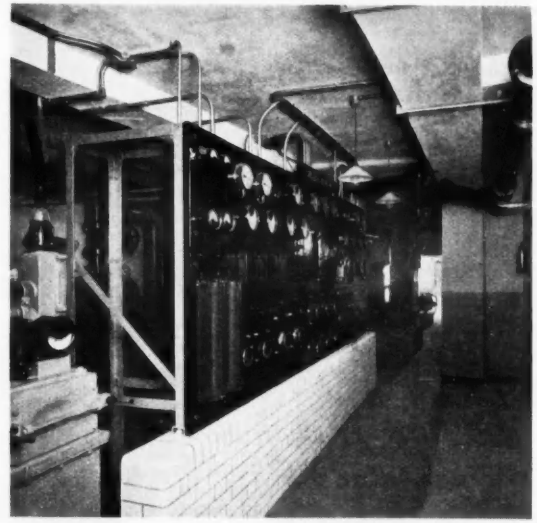
in the managerial suite, and Tasmanian oak for the floor.

with small sculptured figures.

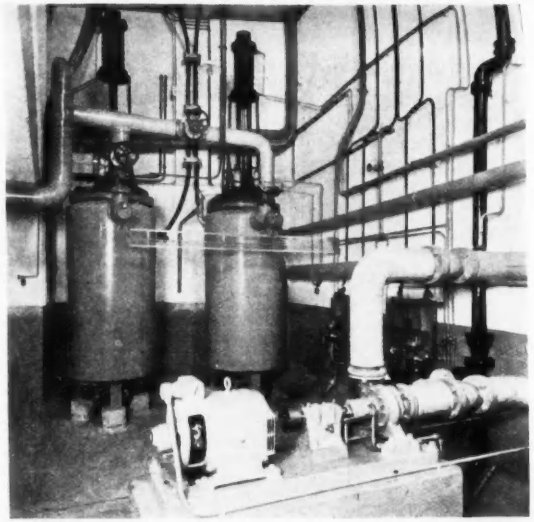
in other office spaces, the ceiling is finished with acoustic plaster.



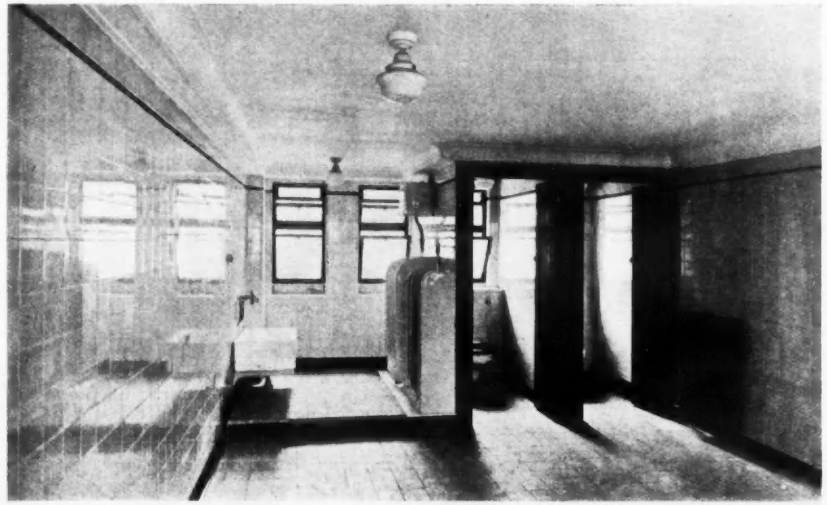
In the lowest of the four basement floors is installed the heating installation, which includes pumps and motors in duplicate for circulating the water between the thermal storage vessels and the radiator system.



The control board, from which can be regulated the whole of the heating and ventilating services to various sections, the temperatures prevalent in them being read from distance-recording thermometers.

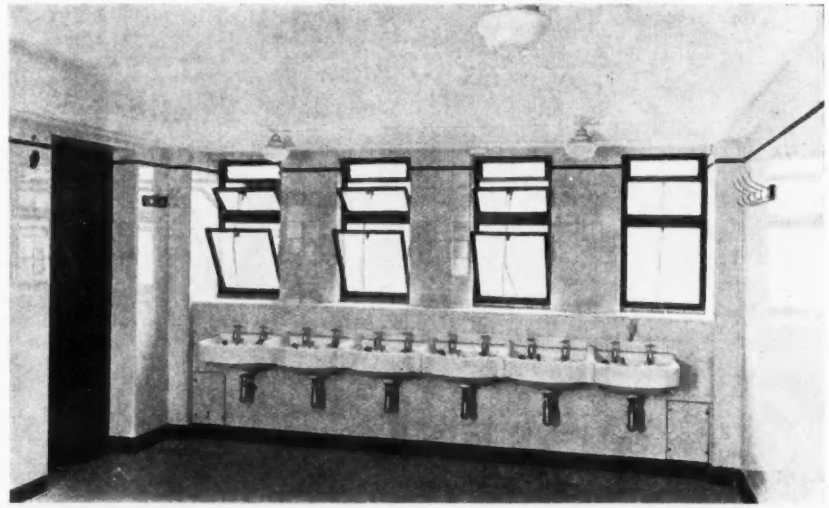


The electrode boilers are each of 375 KVA capacity, and take current by night (i.e. during "off-load" hours) at 2,180 volts (single-phase alternating). The heat is stored under automatic control.



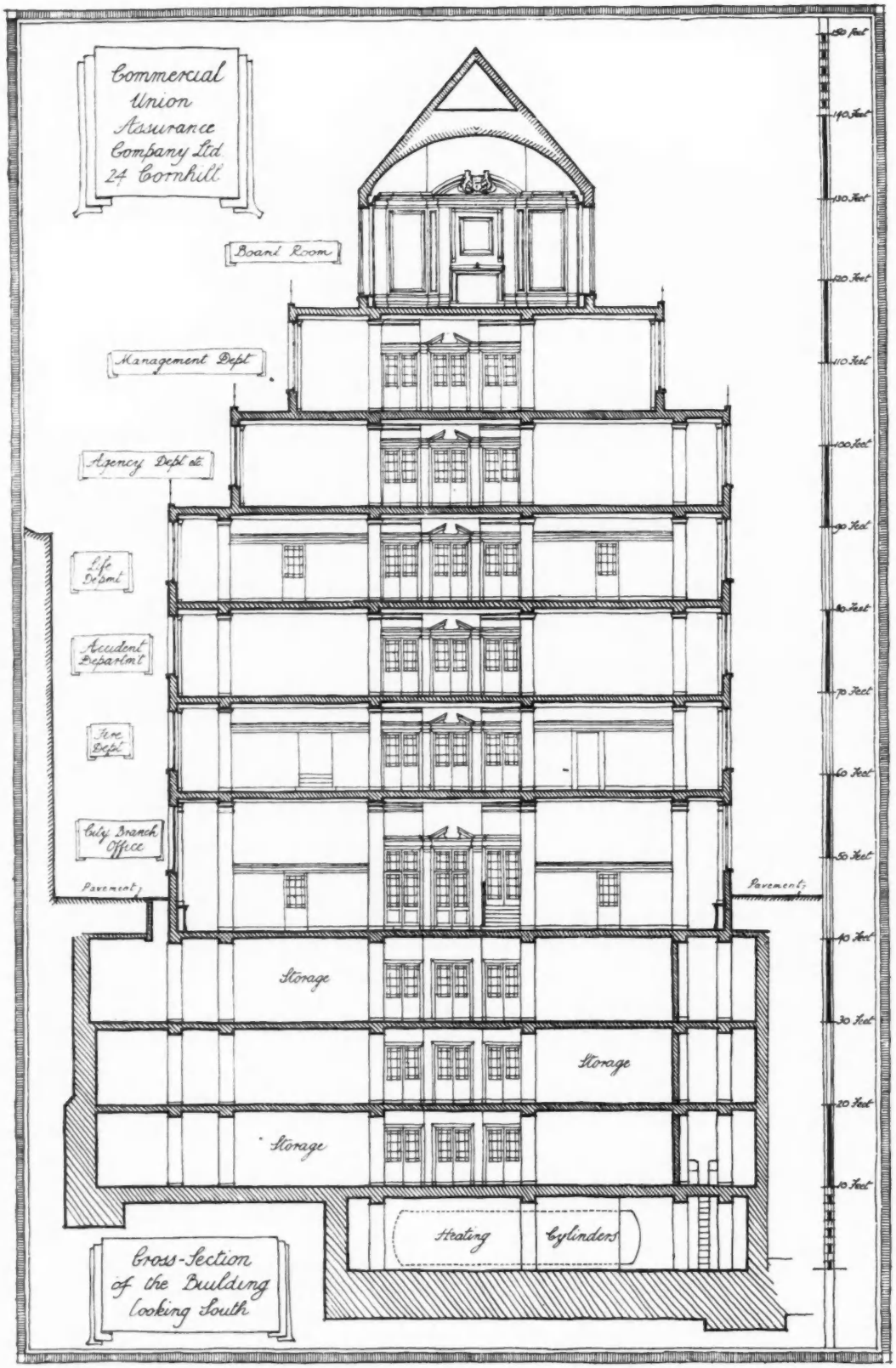
Commercial Union Assurance Offices, Cornhill, E.C.3.]

A typical men's lavatory: the walls are covered with fireclay tiles, the floor with buff quarry tiles, and the joinery is of teak. Most of the plumbing is concealed.



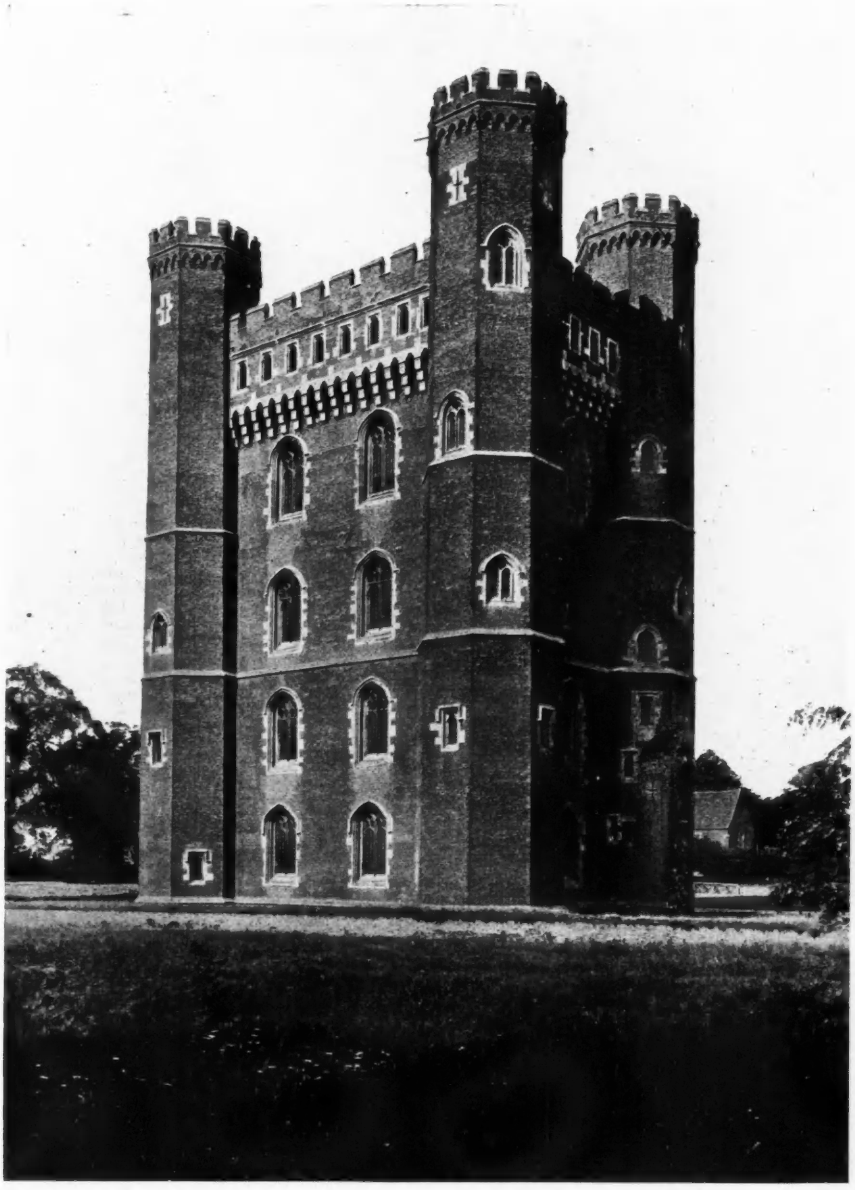
[*By Maurice Webb (Sir Aston Webb and Son).*

A range of lavatory basins. In no other direction has recent advance been greater than in the perfection of apparatus of personal cleanliness.



Commercial Union Assurance Offices, Cornhill, E.C.3. [*By Maurice Webb (Sir Aston Webb & Son).*

The architect's sketch of a cross-section through the building. There are four floors below ground and seven above. The board-room enjoys the comparative seclusion from noise of the top floor, and a roof garden adjoins the luncheon room on the sixth. In proximity are the managerial quarters, and the lower floors house the office staff.



ENGLISH PRECEDENT No. 98

TATTERSHALL CASTLE, LINCOLNSHIRE

(Views from the south-west; and of the tower galleries)

For the Keep or Dongeon of the Castle, built by Ralph, Lord Cromwell, 1431-49, the bricks were not imported, as has been alleged so often, but were made at Boston and Edlyngton More (nine and eleven miles away) by one "Bawdwin the Docheman." The bricks used were of at least two sizes, one being the Flemish dimension—8 in. by 4 in. by 2 in.; the other a size commonly used in Holland—7½ in. by 3½ in. by 1½ in. Prices seem to indicate that even larger bricks were made for certain purposes.

It will be remembered that at Crockernend, Oxon, in 1417, Michael le ffleming and other ffflemings were employed making bricks for Stonor Court. Obviously, it was easier to import workmen than immense quantities of brick.

Two classes of workmen were employed at Tattershall Castle—"Brekemasons" and "Rugh Brekemasons." At this period much moulded brickwork was cut with a brick-axe (a tool superseded by the scutch), but simple chamfered bricks called squynchons (as for vault ribs) were often purpose-moulded as, indeed, also were more elaborate mouldings, which, however, sometimes had to be finished with the axe.

Although "brekemasons" are mentioned in the accounts, bricks are still called "tegulorum," and "waltyle" or even "tegulorum voc. waltyle."

—[NATHANIEL LLOYD.]



JAGO *v.* SWILLERTON AND TOOMER

In the matter of the Arbitration Act, 1889

BY KARSHISH

This is an action before an Arbitrator brought by Colonel Jago, J.P., of Grastopen Manor, Midshire, jointly and severally against Swillerton and Son, builders, and Daniel Winkletop Toomer, F.S.I., architect, both of Nollingborough, for damages for the collapse of Grastopen Village Hall. Mr. Chawlegger, K.C., and a junior represent the plaintiff, Mr. Twistle the defendant Swillerton, and Mr. Pitfall, K.C.—with him Mr. Wrackem—the defendant Toomer. Mr. Chawlegger has just concluded his opening address and calls his first witness, the plaintiff himself.

ii: The Plaintiff Closes

COLONEL VIVIAN FANSHAWE JAGO, examined by Mr. Chawlegger, said that when he decided to build a village hall he asked advice from Mr. Toomer and afterwards instructed him to prepare plans and specification and bills of quantities and secure competitive tenders from certain builders. The tender of Messrs. Swillerton and Son for £3,819 12s. 6d. was the lowest and, under Mr. Toomer's advice, he accepted it. The hall was built and he had paid in all the sum of £3,750 to Swillerton, certified at different dates by Toomer on account of the contract work and certain extra work that had from time to time been ordered. He understood that there was a sum approximating to 5 per cent. of the total cost still to become due to the builder under the contract. He had also paid the defendant Toomer the sum of £175 on account of fees.

Counsel: After the hall was built, Colonel Jago, what happened?—It fell down. (*Laughter.*) Witness added that he did not see it go as he was in bed at the time, but he heard it, and went to the window, as he thought one of his hunters was lashing out in its stall. Witness was going on to state the reasons that had been given him for the collapse, when he was stopped by the Arbitrator. [*What a witness has been told cannot be given in evidence.*]

Witness was then examined by Counsel as to the details of his claim, which witness said was made up, as to the claim for £54, of the cost of repairing fence wall belonging to adjoining owner damaged by the collapse, and in meeting claims by gas company, and for waste of water, and employment of watchman; and as to £200, for delay in completion of his contract by the defendant Swillerton, who under his contract was liable for an agreed sum of £3 a week for delay; and in humiliation and annoyance in not being able to fulfil his ambitions in making use of the hall, or to satisfy the hopes he had, by certain promises, raised in other persons.

Cross-examined by Mr. Twistle on behalf of the defendant Swillerton, witness said he knew nothing of the defendant Swillerton's reputation as a builder. He had no complaint to make with the work before the collapse. He had had Mr. Toomer's assurance that the building was properly built and had no reason to think otherwise.

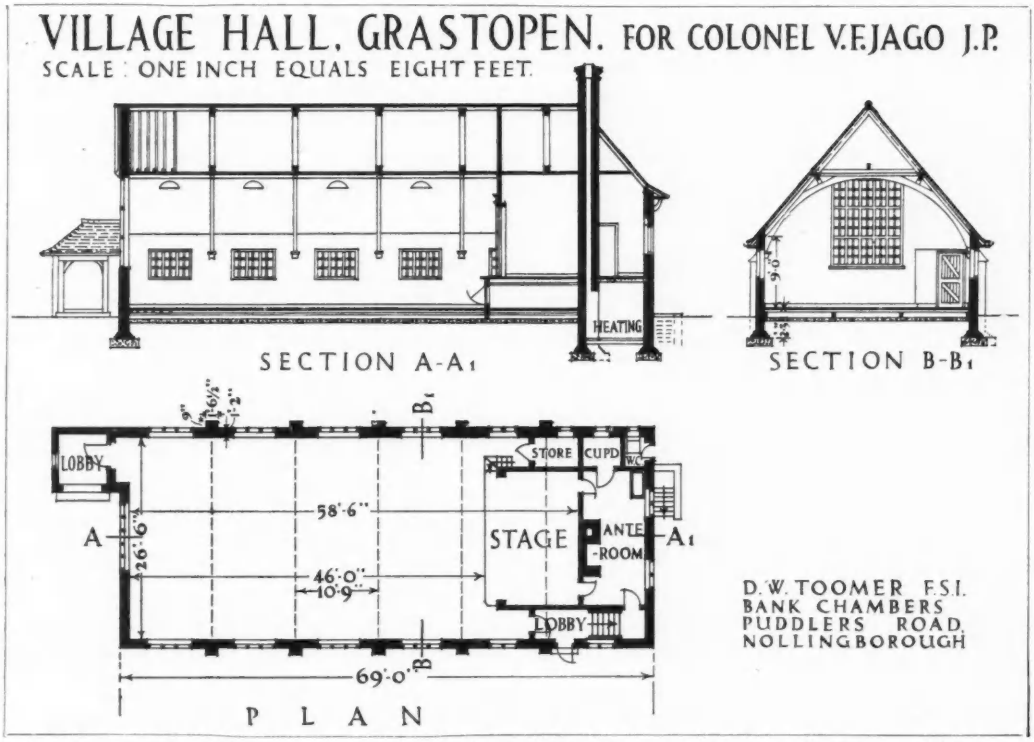


Figure one. Reproduction, on a scale of approximately $\frac{1}{2}$th of an inch to one foot, of the architect's $\frac{1}{8}$th-inch scale drawing of plan and sections of the hall that collapsed.

Mr. Fitfall, K.C., then cross-examined on behalf of the defendant Toomer :

Counsel : You knew Mr. Toomer personally before you appointed him as your architect ?—Yes, he built——

I said "personally." Was he not a member of the Rural District Council when you were Chairman?—Yes, formerly he was.

Did you know him also as a man of high reputation in his profession ?—Good reputation locally, certainly.

Had you previously employed him and known him to be a capable and conscientious architect ?—He built a garage for me. I considered him capable and conscientious, but scarcely a skilled designer.

I did not ask you that, sir, but I quite understand your wish to discredit Mr. Toomer.—I am merely answering your question. I do not consider Mr. Toomer capable as an architect.

At any rate, you were so completely satisfied of his capacity and integrity from actual knowledge of him and his work that you specially selected him to act for you as architect of this village hall in preference to anyone else ?—Yes.

Now, Colonel Jago, did you, or did you not, order Mr. Toomer to cover the floor of the hall with American maple?—I did not.

Now, witness, be careful, please.—Don't speak to me like that, sir.

The Arbitrator : Counsel is only warning you, Colonel Jago.—Witness : I won't stand it. No one is going to talk to me like that. He'd better know it at once.

The Arbitrator : I must call upon you to submit to my authority.

Witness : It's monstrous.

Mr. Pitfall : I should like to assure witness I meant no disrespect. The point is of great importance to my client, and I must have an exact answer.—You've had it.

Did not Mr. Toomer propose to you to use American maple?—He may have recommended it ; if so, I no doubt agreed, for I know nothing of these things.

Do you deny that Mr. Toomer told you that American maple was a tough, refractory wood ?—Yes, I do.

Do you swear that, Colonel Jago ?—Of course I swear it. Am I not on oath ? I have no memory of his saying anything, and if he said a wood was tough and refractory I should not know in the least what he meant.

I put it to you, Colonel Jago, that various alternative flooring boards were described by Mr. Toomer and discussed between you, and that you ordered your architect to use American maple ?—Anyone who says so is a liar.

The Arbitrator : Say "No."—All right, NO.

Counsel then cross-examined witness as to the details of his claim.

In reply to questions in re-examination by Mr. Chawlegger, witness said he knew nothing about building materials and never ventured to offer an opinion upon them, and had given his architect free discretion in all such matters.

Mr. Chawlegger then called PADRIG O'HARA, potato dealer. Witness's volubility caused great amusement.

Counsel : Now Mr. O'Hara—Please to remember the fifth of November.—I do that, sir.

The Swillerton treason and plot?—Sure I'll be after saying nothing against Mr. Swillerton. Isn't he a good customer of mine these six years ?

Were you, Mr. O'Hara, on the fifth day of November last year inside Grastopen Village Hall ?—I did be inside it till it was the way there was no insides to it at all, begor.

Did you leave quietly, Mr. O'Hara?—Is it quietly, and we all at tallywhack and tandem who would be first in it to be out of the Hall !

Just tell the Arbitrator exactly what happened.—Well, your worship, it's the way I was telling the gentlemen; there was a jollification after the annual benefit share out and by the same token the Squire—saving his honour's presence—loaned us the village hall and there were sandwiches and sausage rolls and porter and pork pies in it and beer and whiskey and all sorts. It did be eight o'clock when the tables were after being cleared away and all went soft and gentle as it might be cows going hither and thither about a road, and it milking time, till near closing, when Paul Garnish struck up "John Peel" for old times' sake and he, the boy, at it with both the hands of him, the way you would go to beat a carpet, your worship. "Yurrah, come on, now !" says I, letting a screech at Jane Porch and she standing by; and with that I grabbed the girl and sure the floor did be a fine spring dancing floor all at once, for the other dancing was just a whispering on the flat of your foot like nuns going up the aisle on Sunday, but when we started "John Peel" those new steel mattresses on the hire-purchase, and the diving board at the pool, and spring heel Jack and the devil knows what and all was in it. Sure wasn't it old Sam Jordan himself, your worship, and he bringing the pointer of the weigher at the Black Horse round to twenty stone with a rap like a pistol, lepping and cursing the way he did be blown up with gunpowder, and he hopping and slithering whether he would or no? And every time you gave a hoist to your toes there was bouncings a yard into the air if it was a foot, and the whole crowd going mad with the joy of it and yowling and capering and lepping and screeching the way you'd not hear the music, and not tell what minute was the next with all the spinning and whirling and spurring round and about there was to it, and by the same token weren't the very flags hung out on the roof timbers all bobbing and curtseying in time to "John Peel," and the walls wagging in and out and the picture of Colonel Jago—saving his honour's presence—flapping and jaggering against the wall ? But no one noticed anything amiss, your worship, with the shindy there was and the place going round like the horses at a fair, till just as I was bounding to the door of the retiring room where Gus held the tap, and it standing open—"Yurrah" I yells at Dave Porch, who did be there having a glass, and with that I gave a great stamp of my heels and the floor exploded under me and I rose in the air like a lark before him; and he, the boy, for the kindness he has for me, made a long reach out with the leg of him and hit me a kick in the backside that hoisted me maybe half a yard beyond the lift I had taken; and I drove up to the ceiling and tore away from my partner the way you'd separate two burrs, your worship, and he laughing at me. "Ye filthy blackguard," says I, letting a great yell the way he'd hear my words, for I love the boy. "I'll skelp ye, ye devil," I says, "I'll toe-hoist ye." And at that word the pipe shot forth from between my lips and I've never opened an eye on it since, your worship, for just then some of the windows went off with the glass splintering to the floor, and there came a female screech the way Mr. Billington's siren might be at your ear, and, glory be, there was the Colonel's brave village hall squandering down on top of us, with the walls cracked open and the roof creaking and splitting. "Get out of here," I yells, and with that there was one great rush and scramble to the door-opening and it plugged the way you'd drive a spile into a barrel, with women screeching and clawing and ribs cracking as you might be firing off pistols, and in that time, your worship, George Aitken scatted me a great scat with the bone of his elbow the way my nose was broke right in two pieces, and it all bloody and he like a brother to me. Sure a game of football would be a prayer meeting to what was in it that hour. The half of us were murdered entirely, your worship, and a wonder it is we are all alive and well at this day. Sure it's just the way I was telling the Colonel that the place went down hind end first like any old jackass and it getting ready to roll on the ground. When I was after travelling the distance to the road, there was my brave front wall standing up and the behind part all

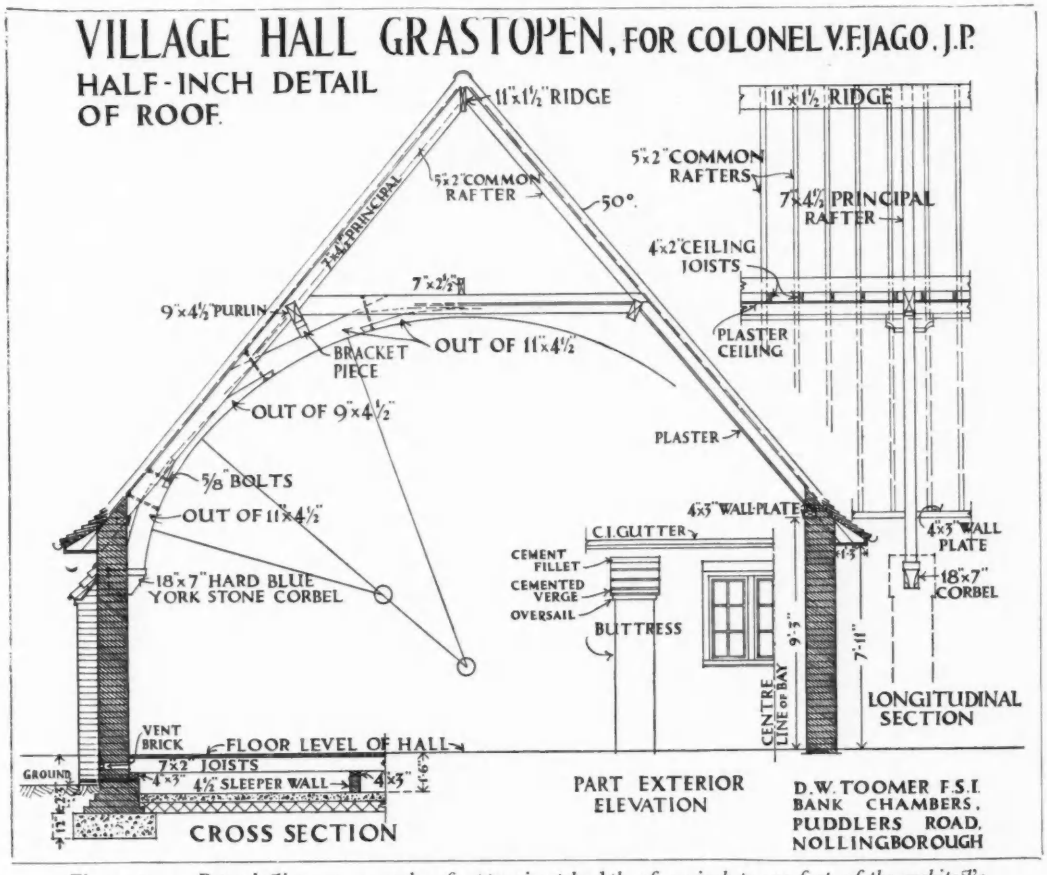


Figure two. Reproduction, on a scale of approximately $\frac{1}{8}$th of an inch to one foot, of the architect's ½-inch scale drawing of details of the village hall that collapsed.

straddling flat on the ground, and then, before you could tell it, something went with a screech the way you might be tearing a linen sheet athwart, and the front end lolled inwards and then, glory be, she went. It was a horrible sight, your worship, and it's myself would as soon be stone blind when I sees the likes of it again, and rather.

Under cross-examination by Mr. Twistle, witness denied that the proceedings were riotously uproarious. No one was drunk but "some might have drink taken." It was just two or three bottles of ginger beer he had had that excited him by inflating him to the lightness of a balloon so that he "rose to it like a bird," and Janet Porch with him. The reason the hall smelt of whiskey was just that two of the lads broke a bottle in the middle of the floor "each being wishful to take from the other."

Mr. Pitfall cross-examining: Now, Mr. O'Hara, how was it that during this quiet, orderly, village dance with its yowlings and screechings and leppings and caperings and kickings in the backside and struggles for the possession of bottles of whiskey, no one noticed the flags jumping and the walls wagging in and out?—Ah, listen to that now! Wasn't it all just a diversion?

And for the sake of the diversion you ignored the fact that the floor had buckled, and went on with your bounding and yelling till you brought the place down on your heads?—Ah, get along with you, sir! How would I be after knowing the floor was not the way a spring floor would be, and it driving me up against the ceiling and catching me again the way it might be my mother's arms? Sure if a man stood still that hour, wasn't he the one that would be the first to take a toss of the floor out through the window-pane?

The Arbitrator: I am obliged to you, Mr. O'Hara. Your evidence has given us a very vivid and complete idea of what happened.

Witness: Ah, not at all! Sure, you're very welcome, sir, and I'm very glad to be of service to the gentleman, and it's any day in the week I'd be giving a bit of evidence and think no more about it than be damned.

MR. RONALD SPOONTIDE, examined by Mr. Chawlegger, said he was a Fellow of the Surveyors' Institution and had been instructed by Colonel Jago, the plaintiff, to report on the cause of the collapse of the hall, for which purpose he had made a thorough examination of the ruins and of the drawings and specification. He identified plan and sections laid before him by Counsel (figures one and two). The hall was 46 ft. long and 26 ft. 6 ins. wide, inside dimensions, with a stage at one end and a retiring room or scullery behind the stage. The walls were solidly built of sound brick in good lime and cement mortar, and rested on adequate foundations. The walls were 14 ins. thick and the side walls stiffened with 18-in. piers, projecting 9 ins. spaced at 9 ft. 10 in. centres, to take the feet of roof principal braces, which rested upon stone corbels built into the piers. The plate taking the common rafters was 9 ft. 0 in. from the floor and the rafters were plastered on the underside up to a horizontal ceiling, 17 ft. 6 ins. from the floor, following the line of the top of the principal collars. The principals were braced with curved members bolted to collars and rafters so as to form an arched sweep from wall to wall, and the whole was properly framed, jointed and bolted and was of sound Swedish red; and from calculations he had made he found that the whole roof was

adequately timbered, braced and constructed.

The floor was of 4½-in. tongued and grooved American maple, secret-nailed to 7-in. by 2-in. red deal joists herring-bone strutted and spiked to 4-in. by 3-in. plates bedded on sleeper walls built against outside walls and on two intermediate sleeper walls running the length of the hall. There was a well-ventilated space between underside of floor and surface of concrete covering site, and the top of concrete foundations was 2 ft. 3 ins. below the floor. Witness then went on to describe the circumstances which, he found, had led to the collapse of the building.

The maple flooring, he said, had been properly laid with flooring cramps, the marks of which were visible on the joists, but the blocks used to line up the first board laid against one side wall, and the wedges driven between the opposite wall and the last boards so as to give these boards a close joint with the rest of the flooring, had been left in place instead of being knocked out before skirtings were fixed, It was this neglect to knock out the blocks and wedges which had caused the collapse. He had ascertained the floor was laid in June and the building finished at the end of August. American maple was supplied by merchants kiln-seasoned and thoroughly stoved, and was known as a particularly "strong" and refractory wood. After the floor was laid, the boards had absorbed moisture from damp air circulating in the space under the floor, and this had caused them to swell; and the presence of the blocks and wedges caused the accumulative expansion of the floor to bring an enormous horizontal pressure on the side walls of the hall. When the floor was danced on a moment came when the impact of some 320 dancers caused the floor to buckle, or rise upwards in the middle, so that it could expand to the dimensions required by the swelled boards by taking a curved line instead of a straight one. In doing this the joists were also bent and the intermediate sleeper plates lifted from their bed, the floor then being supported partly by the bearing of joists on the side sleeper plates, and partly by a lateral thrust of the flooring against the walls.

When once the floor was free to expand to its full dimensions the weight of the dancers operated by an enormous leverage to bring a horizontal thrust against the walls. He had formed the opinion that twelve couples might at any moment have their weight distributed on a strip of floor 12 ins. wide, from wall to wall, and he had made a diagram and calculations, produced (figure three), which showed that the horizontal pressure along line of floor against each foot run of walls was seven tons, giving a total of 320 tons distributed along each wall. He had also found, by calculating the weight of the wall and the position of its turning point (figure four), which was at the outer edge of the line of the top of the footings, that the moment of stability of the walls was 4½ ton-ins., and the upsetting moment no less than 126 ton-ins.; so that the weight of the dancers on the buckled floor would at once force the walls over except for the fact that they were held at the top by the resistance to outward spreading of the roof couple. In his clear opinion the springy character of the floor was due to the weight of the walls, which, with the leverage given by the turning point, was balanced against the weight of the dancers. The swing of the dancers rocked the walls, which at last cracked and gave way and let the roof down. As the tendency of the roof truss was to resist the walls falling outwards, the weight of the dancers operated to expand the roof principals, and these were opening and shutting in time with the music and, in fact, the whole building—weight of tiles and walls and elasticity of roof timbers—were all at work giving springiness to the floor.

Mr. Pitfall here said that so far as Mr. Toomer was concerned, he (Counsel) accepted the last two witnesses' accounts of the circumstances under which the floor collapsed, and did not dispute the allegation that the blocks and wedges between flooring and walls were, in fact, left in place. Mr. Twistle, on behalf of his client, said that he (Counsel) associated himself with his learned brother's acceptance.

The Arbitrator: That may shorten proceedings considerably.

Mr. Chawlegger: In view of the line taken by my learned brothers, it will be unnecessary for me to call the corroborating evidence I was prepared with.

Further questioned by Counsel, witness said that the peculiar characteristics of American maple were well known, and special precautions were necessary in using it. In his opinion, a builder who confined a maple floor over an open ventilated space, and an architect who sanctioned the work, were both negligent.

Cross-examined by Mr. Twistle on behalf of the defendant Swillerton, witness repeated that the hall had been well and carefully built, in strict accordance with the drawings and specification. All the materials were good of their kind. Pressed by Counsel, he said he had seen buildings better built, but agreed that better work had, in those cases, been specified. He could not name any building of the same character as this one in which drawings and specification had been more closely followed.

Counsel: In fact, Mr. Spoontide, this is the best performance of his contract by a builder you ever saw?—I do not say that.

You do say so, sir. You have just told me you never saw a better performance.—That is not the same thing as "the best performance."

The learned Arbitrator will appreciate the niceties of hair-splitting by which you seek to discredit Mr. Swillerton. Do not all buildings in some degree vary?—Certainly.

And though all buildings vary and you never saw better work than this of Mr. Swillerton's, you still deny that it was the best you ever saw?—I have not denied it was the best.

You neither deny nor admit! Come, come, Mr. Spoontide, please remember where you are.

The Arbitrator: Witness says the work was as good as in any other building of the same kind he is acquainted with. You must be satisfied with that, Mr. Twistle.

Counsel to Witness: Have you any reason to suppose that if the contract had called upon Mr. Swillerton to remove the blocks and wedges, he would not have removed them?—No.

His failure to do so, therefore, was due to his not having been given such instructions?—I suppose so.

Mr. Pitfall, cross-examining on behalf of the defendant Toomer, questioned witness on the diagrams and figures given by him in evidence, and then went on:—Tell me, Mr. Spoontide, as an expert in these matters, are the responsibilities of a builder limited by the instructions given him by an architect?—No. He is responsible for proper completion according to the full intent and meaning of his instructions.

Exactly. So, unless Mr. Swillerton was told to leave the wedges in, it was his duty to take them out?—Certainly.

Is that what you meant just now when you told my learned friend that the *failure* of Mr. Swillerton to remove the wedges was due to his *not* having been told to remove them? (The witness showed confusion and did not reply.)

In further cross-examination by Mr. Pitfall, witness admitted that he, in his practice as building surveyor, had never known a floor behave in this way, and had never heard of a similar case. The circumstances were surprising; he agreed that "entirely unprecedented" would not be too strong a word to describe them. Asked by Counsel how an architect could be considered negligent in not foreseeing what was "entirely without precedent" witness did not reply, but stated that he considered the architect should have directed the wedges to be removed.

He admitted, however, that he had never himself given such an order, as he would expect the builder to knock the wedges out. He did not agree that, in saying this, he was contradicting himself twice over. Counsel so twisted things about that he was tricked into contradicting himself. (Loud laughter, in which the Arbitrator joined.)

In re-examination by Mr. Chawlegger, he said that though an architect was only bound to give general supervision, he was responsible for such instructions and supervision as were necessary to secure that the whole work was properly executed. The builder was also responsible, within his instructions, for the soundness of the work, and he considered that Mr. Swillerton was negligent in not removing the wedges, and that Mr. Toomer was negligent in not seeing that they were removed.

Area of dancing floor: $46' \times 26'\ 6'' = 1{,}219$ *sq. ft.*

Maximum load on strip 12″ *wide*—24 *dancers* × 140 *lbs.* = 2,360 *lbs.* = 590 *lbs. central load on half floor.*

Crown of buckled floor: 6″ *above normal.*

Horizontal thrust at $x = \frac{13{\cdot}25 \times 590}{0{\cdot}5 \times 2240}$

$= 7$ *tons (nearly) per ft. run of wall.*

Total thrust on each wall = 320 *tons.*

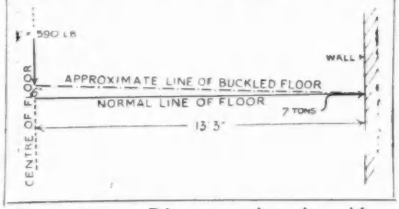


Figure three. Diagram, given in evidence by Mr. Ronald Spoontide, F.S.I., *showing computation of horizontal thrust of buckled floor.*

Mr. Chawlegger then called Mr. ALF. GROAG, Surveyor and Licentiate of the Royal Institute, who described himself as a "practical architect." In the course of his professional duties he had become well acquainted with the "bursting power" of American maple. Witness was of opinion that all builders and qualified architects and surveyors were acquainted with this power. He himself would make a particular point of seeing that wedges were taken out before skirtings were fixed.

Mr. Pitfall, cross-examining: What exactly do you mean, Mr. Groag, when you say you are a practical architect? Do you mean a practising architect?—That's right. I consider I am a practical man.

You concern yourself with facts rather than theory, is that it?—That's right, I'm practical.

That is, practically speaking, you practise as a practical practitioner. Is that right, too?—That's right—but I've done better out of pigs the last year.

That certainly sounds very practical, Mr. Groag. Now, will you tell me, speaking as a practising practical practitioner, what your practical experience of maple flooring has practically been?—I built a range of piggeries floored with maple, and the maple swelled when the pigs got on to it, and its bursting power threw one of the walls down.

And the pigs all escaped? Is that right?—That's right.

I thought so. I understand, Mr. Groag—correct me if I am wrong, for I have the misfortune not to be an architect—that if the pigsty had not collapsed, you would not now be wise to what you describe as the "bursting power" of maple?—No, I should not.

Did you consider it due to your negligence that the pigsty fell down, Mr. Groag?—Well, I know better now than what I did then.

Your practice makes you perfect, in fact?—That's right.

And do you consider that Mr. Toomer should have known of this bursting power?—Well, I know, don't I? I don't see why he hadn't ought to know, too.

Do you say that Mr. Toomer was negligent in not ordering the wedges to be removed?—Yes. That's right.

But, in doing the same thing, you were not negligent?—Well, I shouldn't do it now.

In re-examination witness said that he had since used maple flooring for piggeries successfully by leaving room for expansion. The piggeries were his own property and the maple floor was experimental.

MR. GEORGE PROSTODE, Managing Director of Prostode and Bonner, Ltd., timber merchants, said he supplied American maple flooring to the order of the defendant Swillerton. It was ordinary grade of good quality and suitable for flooring. American maple was seasoned by a special stoving process by the American firms who manufactured and exported the flooring, and witness took care to keep it dry or it would warp and wind. It was generally known as a tough and very "strong" wood and could only safely be used in dry situations. In his opinion omission to remove the wedges amounted to culpable negligence on the part of someone. He would himself at once notice the wedges, for a maple floor was always allowed room to expand when there was any chance of the wood getting damp.

Cross-examined by Mr. Twistle, witness said that he never issued warnings to buyers of maple, as he assumed buyers knew what they were buying. He had never heard of a floor behaving as this one had done, but he was not surprised. If the floor had not been danced upon he did not know what would have happened. He did not, in that case, think the pressure would be enough to knock the wall over or slide it across its bed. Pressed by Counsel, he admitted that except for the floor having been used for violent dancing he thought it would not have buckled: it would have remained flat, but in a state of high compression.

In re-examination, witness repeated that the wedges should have been removed, as, sooner or later, from one cause or another, the floor would be likely to buckle.

Mr. Chawlegger then called ALBERT RUMBLER, builders' labourer, who said he was employed for a time by the defendant Swillerton while Grastopen Village Hall was being built, but was "paid off."

Mr. Chawlegger: Do you remember the floor being laid?—'Course I remembers.

Do you remember Mr. Swillerton ordering the wedges between the flooring boards and walls to be removed?—'Course I do.

Can you recall in what words Mr. Swillerton gave that direction?—'Course I can.

What were they?—Take away them blurry wedgers.

Weight of wall per 12″ *run, in lbs.*

$=$ *brickwork:* $10'\ 6'' \times 1'\ 2'' \times 112 = 1{,}372$

roof: $5' \times 1' \times 12 = 60 = 1{,}432$

Moment of stability about

$A = \frac{1{,}432\ lbs. \times 7''}{2{,}240\ lbs.} = 4\frac{1}{2}$ *ton-ins.*

Upsetting moment about

$A = 7$ *tons* $\times\ 18'' = 126$ *ton-ins.*

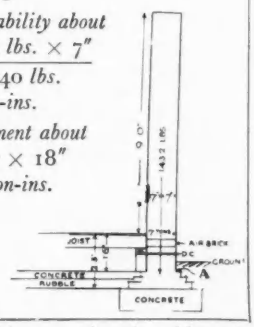


Figure four. Diagram given in evidence by Mr. Ronald Spoontide, F.S.I., *showing moments of stability and upsetting.*

The Arbitrator: I think, Mr. Chawlegger, that witness is scarcely in a fit state to give evidence. The trip to London has upset his moral equilibrium. If you wish, I will allow you to interpose him to-morrow. (*To witness*) Leave the room.

GEORGE TWISS, called and examined by Mr. Chawlegger, said he was a carpenter and had been temporarily employed by Mr. Swillerton, and was responsible for the laying of the floor of the hall.

Counsel: Did Mr. Swillerton give you orders to remove the blocks and wedges between the floor and walls after the boarding was laid?—Well, I don't know as what I exactly heard him say it in so many words.

Counsel: Remember where you are, and be careful what you say.

Mr. Pitfall: The learned Counsel is cross-examining his own witness.

Mr. Chawlegger: I am doing nothing of the sort.

Mr. Pitfall: I object that my friend is treating his witness as a hostile witness because he has not got the answer he wanted.

The Arbitrator: I think, Mr. Chawlegger, that you reprimanded your own witness. That, of course, is not allowable. I think Mr. Pitfall's objection is good.

Mr. Chawlegger: Why did you not take the wedges out?

The Arbitrator (*To witness*): You must be careful in your answers to the questions Counsel asks you.

Witness: Very well, then, I did take the wedges out. (Laughter.)

Mr. Pitfall: Mr. Arbitrator, I submit that as all parties are agreed that the blocks and wedges were left in, witness's evidence is worthless.

Mr. Chawlegger and defending Counsel having intimated that they had no further questions to ask the witness, the Arbitrator, addressing him, said: You can go, sir. I warn you if you are ever called upon to give evidence again, you must take care what you say, or it will be the worse for you.

Witness (*resentfully*): I was only being careful, the same as the gentleman told me to.

The Arbitrator: Leave the room.

Mr. Chawlegger said that he had no more witnesses to call and that that was his case; and the Arbitrator, at the request of Mr. Pitfall, who pointed out that it was then nearly twenty minutes to four and explained that he had been briefed only the night before, adjourned the reference till ten o'clock next morning, when Mr. Pitfall would open the case for the defence.

[*It is a little difficult to see why Mr. Chawlegger called the last two witnesses; but apparently the evidence they were expected to give was that Swillerton had himself noticed the blocks and wedges and ordered their removal. If this were proved it could be argued that Swillerton was, in fact, well aware of the risk of leaving them in, and that the collapse was therefore due to his negligence in not seeing that they were knocked out. The labourer Rumbler was apparently a drunken reprobate with a grudge against Swillerton or Twiss, or out for the lark of the thing; and Twiss, the carpenter, who had been in trouble for leaving the wedges in, was frightened by Counsel into being "careful" to exculpate himself.*]

(NEXT WEEK—iii: THE DEFENDANTS OPEN)

LAW REPORT

LIGHT DISPUTE: CLAIM FOR DAMAGES

Dorr v. *Austin. King's Bench Division. Before Mr. Justice Rowlatt*

THIS action arose out of the demolition of some old fishermen's cottages at Broadstairs and the erection of a house on the site which, it was alleged, interfered with the comfortable amenities of certain of the lower rooms of the plaintiff's house, against which the defendant's newly-erected house backed.

The plaintiff was Mr. G. F. Dorr, of Revelstoke Road, Wimbledon Park, S.W., who sued, as the owner of Arcadia House, Victoria Parade, Broadstairs, and the defendant was Mr. Percy Austin, of The Dingle, North Foreland, Broadstairs. The claim was for damages for alleged obstruction of access of light to ancient lights. Plaintiff said that when defendant erected his house in November, 1928, he built a wall 14 ft. higher than the wall of the cottages which formerly stood on the site. Plaintiff also claimed in respect of depreciation in the value of his property.

Defendant, by his defence, said in November, 1928, as the owner of Ada Cottages, Charlotte Street, Broadstairs, he pulled them down. They had a rear wall some 20 ft. 6 ins. n height. He erected in the place of the cottages the building now complained of. The new building had a rear wall some 6 ft. 6 ins. further to the west of the site of the old wall, and it was 34 ft. 6 ins. in height. He denied the plaintiff's allegation that the wall interfered with the light coming to the plaintiff's windows.

Mr. Charles Doughty, K.C., and Mr. T. Eve appeared for the plaintiff, and Mr. Morton, K.C., and Mr. Turnbull represented the defendant.

Mr. Moody, an architect, of Broadstairs, said the result of the defendant's new building was to make plaintiff's rooms, which were affected, less comfortable than before. The light now was an "annoying light," and one could not see anything. In addition, the new building had depreciated the value of plaintiff's house. The back room of the house was now used as an office, and this and the basement kitchen and rooms near were affected. He put the damages to these rooms at over £250. Witness expressed the opinion that the basement, including the kitchen, was now unusable.

Mr. W. H. Woodroffe, F.R.I.B.A., also gave evidence in support of plaintiff's case.

Mr. Arthur Greville Hiscoke, F.A.I., of Messrs. Cockett, Henderson & Co., estate agents, of Station Gates, Broadstairs, said the plaintiff had purchased the lease of the property and had paid a premium of £150 for it. There were about eight years of the lease to run when plaintiff purchased the freehold for £1,600. Witness valued the plaintiff's freehold premises at £3,000 before the defendant's house was erected. But, having regard to the obstruction caused by the defendant's property, he put the figure at £320 less, which he estimated was the amount of damage done.

Mr. P. J. Waldram, the daylight illumination specialist, was the first witness for the defendant. He said he visited Broadstairs on November 5 last and inspected the plaintiff's property. The effect of the defendant's building, by placing the obstruction farther away, would give the house more sky and reflected light to the greater part of the kitchen. The light to the kitchen was better than it used to be, being a diffusion of reflected light. The kitchen as a whole was not damaged by defendant's building. The office light was excellent. As long as a room had half its depth visible to the sky it was a well-lighted room. He saw practically no damage to plaintiff's building. On the supposition that there was damage, he put it at £50.

Mr. Wm. Leonard Dowton, an architect, of Dowton & Co., Rye Lane, Peckham, London, said that Ada Cottages were demolished in June, 1928. They were very old fishermen's cottages, built in split flint, with the roof tarred and black. In his opinion, the defendant's building in no way interfered with the comfortable user of the plaintiff's house as a whole.

His Lordship, in giving judgment, said the question was whether the ground floor and kitchen had been adversely affected by the defendant's building. If they had been, then the whole building was adversely affected. The basement was always a dark place, even before the cottages were pulled down. He had listened to a great deal of interesting and skilled evidence. As to the kitchen, he found that it had been seriously affected by the defendant's building. As regards the office, it was affected also, but in view of the fact that the room was let and the light fair, the damages would be very small. In spite of all the evidence for the defence, he thought that the defendant's building had had a great effect on the light of plaintiff's kitchen. He thought a fair figure for the damage was £125. Judgment for plaintiff for £125 and costs.

LAMINATED BOARD

Some Practical Details of the New Material

BY THE LATE SIR LAWRENCE WEAVER

NO new material that I know has created so marked a development in design as laminated board. The making of great panels and the whole art of veneering furniture and decorative interior woodwork are profoundly changed in technique. For many years now Germany has made very full use of laminated board, and the nature of the material explains some developments in German furniture design, which otherwise would be difficult to understand. But a new material brings with it new problems, however much it may solve old difficulties, and this is true of laminated board. Its technique of treatment is widely different from that of solid wood, and I have been at pains to discuss the new characteristics with men who, from large use of it, have built up experience of its ways.

Its chief value, perhaps, lies in the great possibilities it offers to safe veneering, not only of surfaces of normal size, but of those so large that no craftsman in the past would have faced the task. Some practical notes may therefore be of value to designers who need to bear in mind the dangers as well as the wider possibilities of a new material.

It is substantially, but not always and perfectly, true that the best laminated boards remain dead flat and free from internal movement. It is also true that the waterproof cement, used in building up the board, impregnates the thin laminations and seals the cells of the wood against the absorption of moisture. But the manufacture of the boards, as of everything else, is subject to a measure of human carelessness and error.

The best laminated boards are made of Gaboon mahogany, which comes from West Africa, and is called mahogany by courtesy, though it is not so botanically. It has many of the characteristics and the colour of true mahogany, but in its natural state is rather more absorptive. In any case it is not possible to ensure that the outer ply of Gaboon shall have wholly lost its liability to absorb some moisture. In the case of other approved brands the core is of Memel pine and the covering ply of alder, which is specially free from the liability to warp.

The best boards to choose are those in which the outer plies have the fewest possible joints, because such

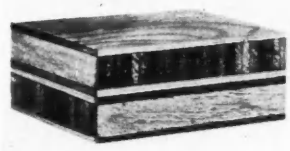


Figure one. A duplex laminated board, good for the veneering of very large surfaces.

joints are apt to be seen through the veneer, though often so faintly that they would not be visible unless the critic was looking out for them.

The best laminated boards are built up of denatured wood, but it would be unwise to regard them as being as impermeable as marble or metal. This is proved by the fact that the best results in veneering are only certain when the veneer is double. A good straight-grained veneer should be laid on the outer ply of the board with its grain at right angles to the grain of that ply. Some experts prefer that this intermediate veneer should have its grain at an angle of 45 degrees to the grain of the ply, but a right angle is the more common practice. The finishing figured veneer is then laid with its grain following the grain of the outer ply. Only those who have intimate knowledge of the behaviour of veneers can realize that defects may develop if there is any difference between the way that veneers are laid on the two sides of a board, whether that board be of solid Honduras mahogany or of laminated wood. It is bad practice to lay a veneer on one side only of a board, for its "pull" is bound to lead to distortion somewhere.

So important is it to reproduce exactly, on both sides of the board, the conditions of "pull" of the final veneer, that if the veneer on a table top, for example, is quartered on the upper face, it should be quartered in exactly the same way on the under face, even although it may never be seen.

Another important technical point arises on the veneering of unusually large panels. Laminated board is to be obtained as much as two inches thick. Some experts dislike so great a thickness because the pressure of a veneering press, powerful enough to deal with very large panels, may be great enough to cause some crushing of the laminated core if it is nearly two inches thick between the outer plies, especially if some laminations have gone askew. Mr. C. A. Richter, of the Bath Cabinet Makers' Company, Ltd., who has a long experience in using laminated board, tells me that he has found the best results, in very large work, from cementing together two threequarter-inch boards to form a carcass for double veneering on both sides, and that the pair of adjoining plies half-way through the double board so stiffens its fabric as to prevent internal crushing. I give an illustration showing how the two parts of this duplex board have their grains running at right angles (figure one). This still further reduces the remote risk of movement.

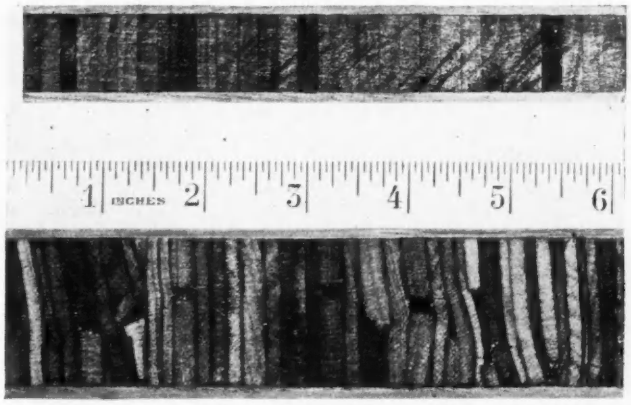


Figure two. A comparison of laminated core sections—the upper one regular, the lower one likely to cause defects in veneer laid upon it.

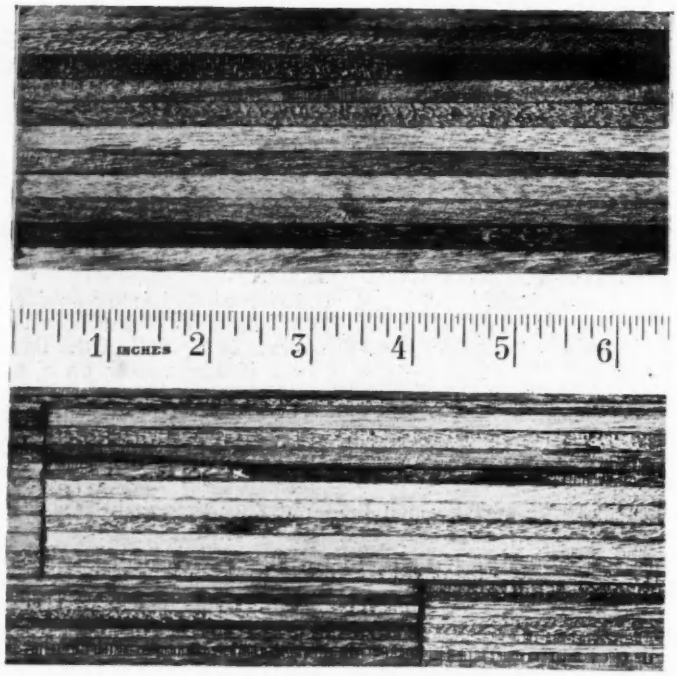


Figure three. A comparison of boards with the outer ply stripped off—the upper one with the laminations regular, the lower with defective jointing and laminations of varying widths.

The essence of safety in the use of laminated board is to ensure that the brand used has a perfect core. In some makes there is considerable carelessness in getting the laminations packed together solidly at right angles to the covering plies, with the results that gaps are left and there are distortions in the laminations. Figure two contrasts a board, perfect in this respect, with another revealing defects which are dangerous.

Veneer is an exceedingly sensitive material. It is not enough that the outer ply of the laminated board shall seem absolutely flat throughout its length and width. If there are cavities within the core, as illustrated by this bad example, there is a tendency for a sinking to develop in the outer ply, which carries with it, of course, the finishing outer veneer. This produces depressions, and even fractures, in the outer veneer, with the result that an otherwise perfect job will show distressing defects. But even without distortion of the laminations there may be cavities in the core owing to breaks in the laminations lengthwise of the grain, as is shown by figure three. It is therefore important that the brand of laminated board chosen shall be absolutely homogeneous in every direction, and free of cavities, whatever their cause.

One point must be plainly dealt with, and that is the rather undesirable variety in the quality of various brands

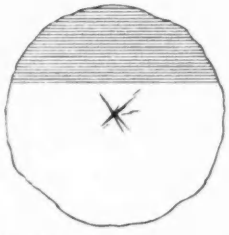


Figure four (A). *Veneers cut across the log. The slicing is very apt to "distress" the grain.*

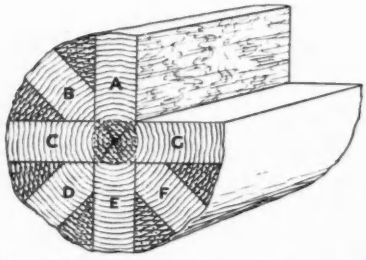


Figure four (B). *A log quartered into flitches (lettered) from which veneers are cut.*

of laminated wood now on the market. For obvious reasons I mention none of them, but it has to be stated that not all are of sufficiently sound construction to ensure that fine veneers laid on them will always stand perfectly. There is no infallible way of discovering defects in the core of laminated strips contained between the two outer plies if they are not revealed on the outer edges of the board. Some careful and skilful users can, by tapping the boards, assure themselves that the adhesion is perfect all over. This test by tapping is applied at the factories before the boards are shipped, but it is not possible to rely wholly on that inspection. But I gather from cross-examining many users that the best of the brands rarely show the defect of hollows in the core, which becomes more and more rare as the technique of manufacture becomes increasingly perfect. After all, the best of solid Honduras mahogany is liable to the development of defects not visible when the veneer is laid.

Perhaps I may interpolate here a word on the making of veneers, because there is some confusion as to what is meant by veneers cut "on the quarter."

Mr. Leslie C. W. Jenkins—a past-master in the art of veneer cutting—has kindly given me the two accompanying sketches (figure four).

"A" shows veneers cut across the tree. It is almost impossible to employ this method, without the grain being "distressed" by the process of cutting. When the veneer is cut across "crown" or "heart," however well one side may be cut, the other side is sure to be "plucked" or "torn out." Not only does the cutting of a veneer across the tree result in a badly cut veneer, but in almost all cases, and particularly in oak, the veneer would be lacking in figure. "B" shows the log quartered into flitches which are marked A, B, C, D, E, F and G. The intermediate pieces and the "heart square" (cross-hatched on the sketch) are waste and the veneers are cut from the flitches (lettered). The circular lines on these flitches indicate the annular rings, and the lines crossing the circles, the medullary rays. In certain very hard woods the veneers need to be sawn, but the more ordinary method is to cut them from the flitches with knives on a slicing machine, much as a plane takes off a shaving. The knife always cuts the wood across the grain. The

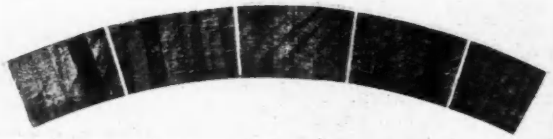
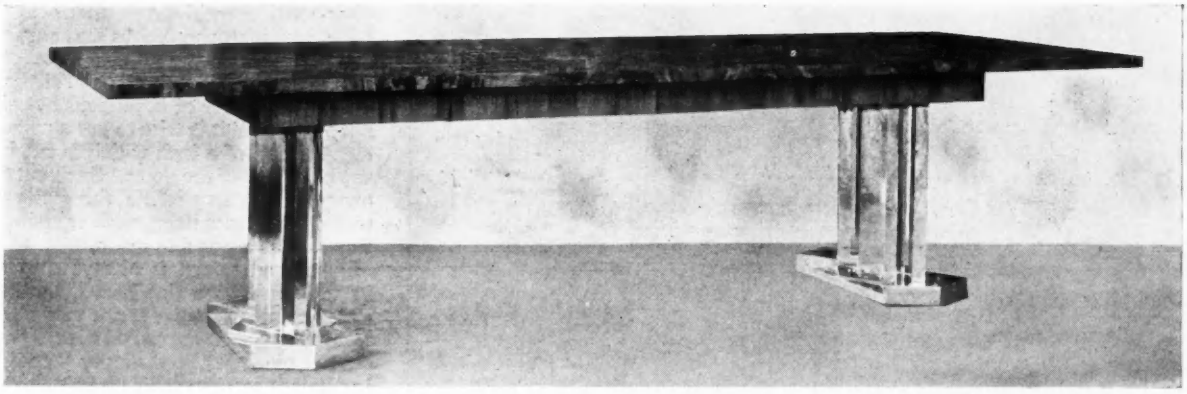


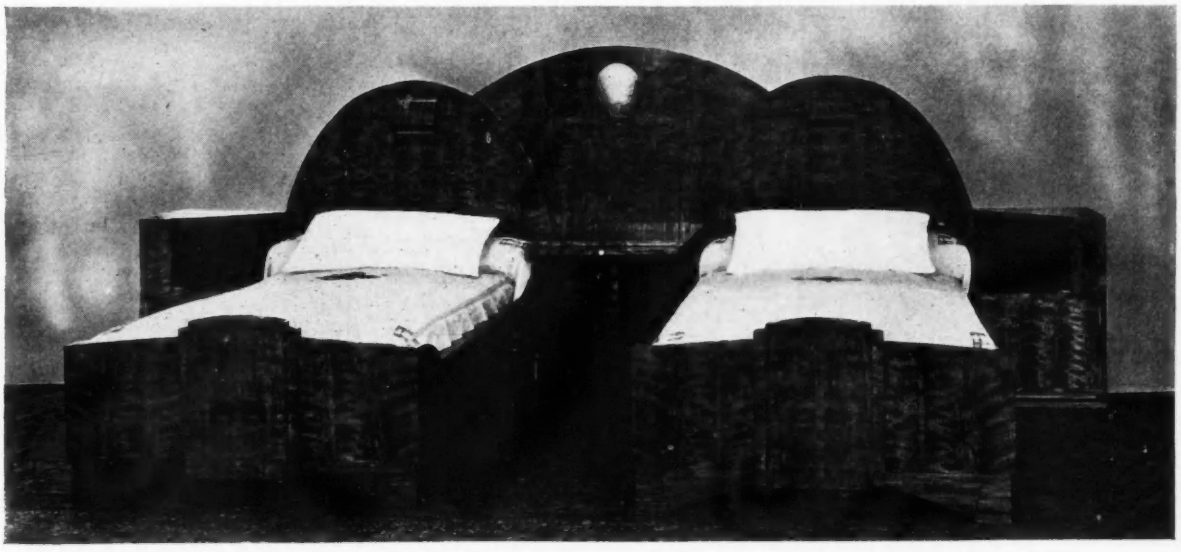
Figure five. Laminated board, divided and re-cemented for work that is curved on plan.



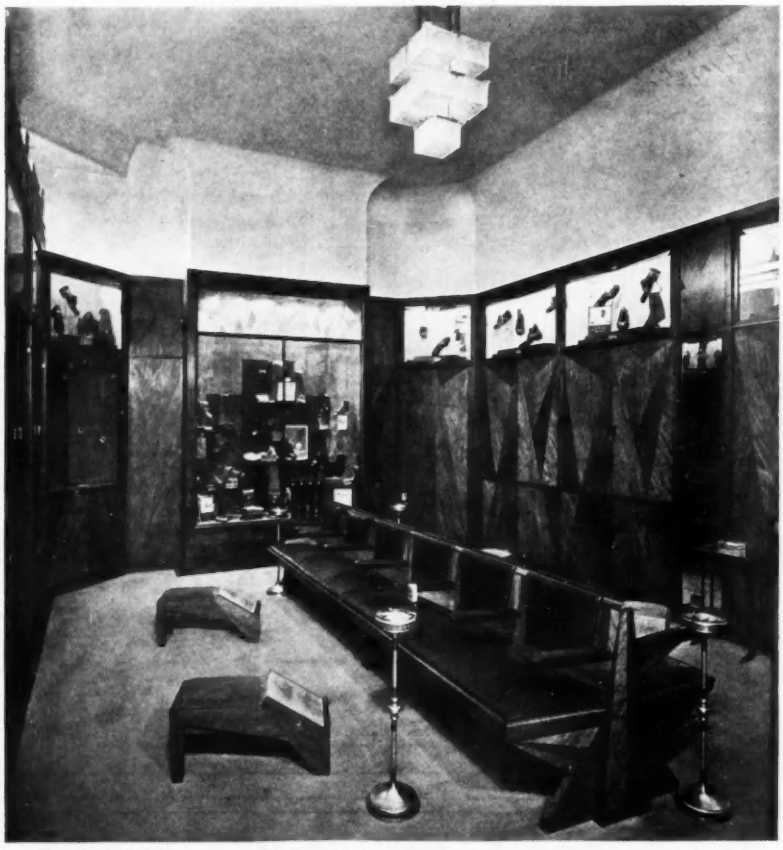
A dining-table of laminated board, veneered in walnut, with pedestals of stainless steel. Designed by Joseph Emberton.



A boardroom table with bands of yew, border of cross-grained walnut, and burr centre. Designed by R. W. Symonds and Robert Lutyens, in partnership.



A pair of bedsteads, veneered in drapière mahogany on laminated board. Designed by Joseph Emberton.



Interior of fitting room of a boot shop, veneered in walnut on laminated board. Designed by Joseph Emberton.

sketch shows the heart in the centre of the log, but very often it does not stay in the centre but twists about throughout the length of the log, causing great waste in conversion.



Veneered laminated doors at the Royal Horticultural Hall. Designed by Easton and Robertson.

An important and encouraging feature of laminated board is that it is not susceptible to dry rot. I lately inspected some very fine panelling in a new building where, by some ill-luck, dry rot had made its appearance in hard wood stiles and rails, but the panels of laminated board were absolutely unaffected.

At first sight it may appear that laminated boards will not be as satisfactory as solid wood in respect to the *construction* of a piece of furniture or for architectural purposes. It is true that normal methods of dove-tailing, tenoning, etc., have to be modified, but practical joiners and cabinet-makers with whom I have discussed the question, seem to have no difficulty in devising new ways of making joints adequately strong for their purpose.

Mr. Tait has pointed out to me that the lift cars at Selfridges, which are built up of laminated panels butted together, have stood so well, despite the endless racket of their use, that there has not been a trace of cracking in the painted internal angles.

In the making of thin doors, e.g. for wardrobes, sideboards, etc., it is by some experts thought wise to provide the door with a solid edge about 1½ in. wide, to which the hinges and the lock can be attached, and this process is sometimes called "lipping." If, however, a thin door of laminated board is not "lipped" it is wise to use a mortice lock instead of a lock which is cut into the back face of the door. Such cutting away is apt to disturb the balanced pull of the outer plies, with warping of the door as a possible result.

Laminated board is always supplied in the trade as a flat board, but that does not mean that it is not very useful for work which is curved on plan. Such curved work is also done by "coopering," or it may be built up in 3, 5, 7 or more plys by moulding it on a wooden template, sometimes known as a "caul." It is, however, possible to use ordinary laminated board for this purpose by stripping off the outer plies, shaping it on a "caul," and double veneering it after it has been so shaped. Alternatively, the outer plies can be stripped off the core, which is then divided into pieces about 2 ins. wide. These are planed down to a wedge shape, reglued to form a board curved on plan (figure five), and then double veneered. This involves much less work for a furniture maker than building up a purpose-made laminated core.

I come now to the economics of the use of laminated board for the carcassing to be veneered.

The fair comparison is with the next best material, Honduras mahogany, which has stood the test of time in this relation. The cost of the mahogany itself in one inch boards of average widths and lengths may be taken at 1s. 2d. per superficial foot, to which should be added for sawing, jointing,



A red lacquered cabinet built of laminated board. Designed by T. S. Tait for his own house.

glueing up, planing, finishing, handling and waste, fifty per cent. This means that panels such as wardrobe doors, bedstead ends, etc., finished ⅞ths inch and ready for veneering, cost 1s. 9d. per square foot, and even this price assumes modern plant, and the handling of large quantities. It would probably be fairer to regard 2s. as the proper price, if wide boards are wanted.

The type of laminated board with which I am most familiar costs approximately 1s. 4d. per square foot. On the other hand, solid Honduras does not require double veneering as does laminated board, which means an extra 2½d. per square foot on each side for veneer, and the labour of veneering.

Broadly speaking, therefore, there is nothing between the prices of the best laminated board of Gaboon mahogany throughout and the best solid Honduras mahogany.

Having regard to the enormous advantages which attach to the best laminated board, it is easy to prophesy that it is only a question of time for Honduras mahogany to disappear from this particular use, except by such people as think that solid wood offers some kind of moral or sentimental advantage simply because it is solid. The accompanying illustrations show with what skill many well-known architects have made use of the opportunities afforded by this new material.

SOCIETIES AND INSTITUTIONS

PROFESSOR C. H. REILLY ON ARCHITECTURE

If the face of our towns and villages was to be saved from building horrors, said Professor C. H. Reilly in an address to the North of England Education Conference at Harrogate, school children must be taught to appreciate art, particularly architecture.

It was not sufficient merely to educate the architect, for today he was only responsible for one building out of every five erected. The rest were put up without his assistance.

The great need, therefore, he explained, was to improve the building taste of the mass of the people. Probably that taste was never so low as it was today.

If one walked from the centre outwards of any town or village, one could not help noticing the general drop in the level of taste of the ordinary dwelling-house the farther one went.

Referring to the need for improving public taste, he said the general level of taste could only be raised by the schoolmasters. It was fortunate that exercises in visual taste as differentiated rom literary taste had at last been introduced.

Last year 6,900 school children took to art—that was drawing plus a period in the history of architecture, painting and sculpture—in the Schools' Art Examination of the Northern Universities.

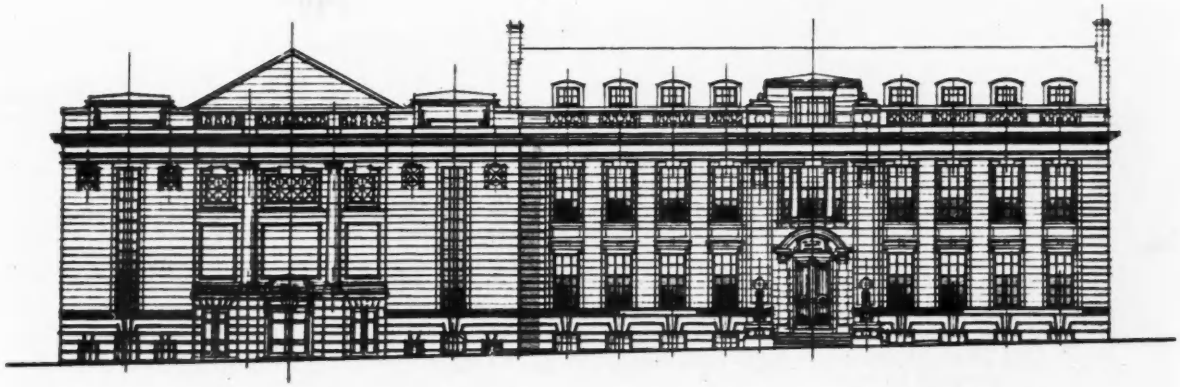
He said he hoped that a critical study of the visual arts would soon be part of the curriculum of all secondary schools.

I.A.A.S. ANNUAL ELECTION

As a result of the annual election of the Incorporated Association of Architects and Surveyors to fill ten vacancies on the Council of the Association, the following members have been elected: Messrs. W. T. Bowman, O.B.E., M.I.STRUCT.E.; E. E. Bridge, L.R.I.B.A.; A. Casse, F.S.I., A.M.I.STRUCT.E.; A. W. S. Cross, M.A. (Cantab.); E. G. Culpin, J.P., L.C.C., M.T.P.I.; R. S. Gledhill; R. V. Hall, M.I.M. AND CY.E.; H. F. V. Newsome; R. I. Tasker, J.P., L.C.C., M.I.STRUCT.E.; L. J. Veit, F.S.I., M.I.M. AND CY.E. Major Tasker is the outgoing President.

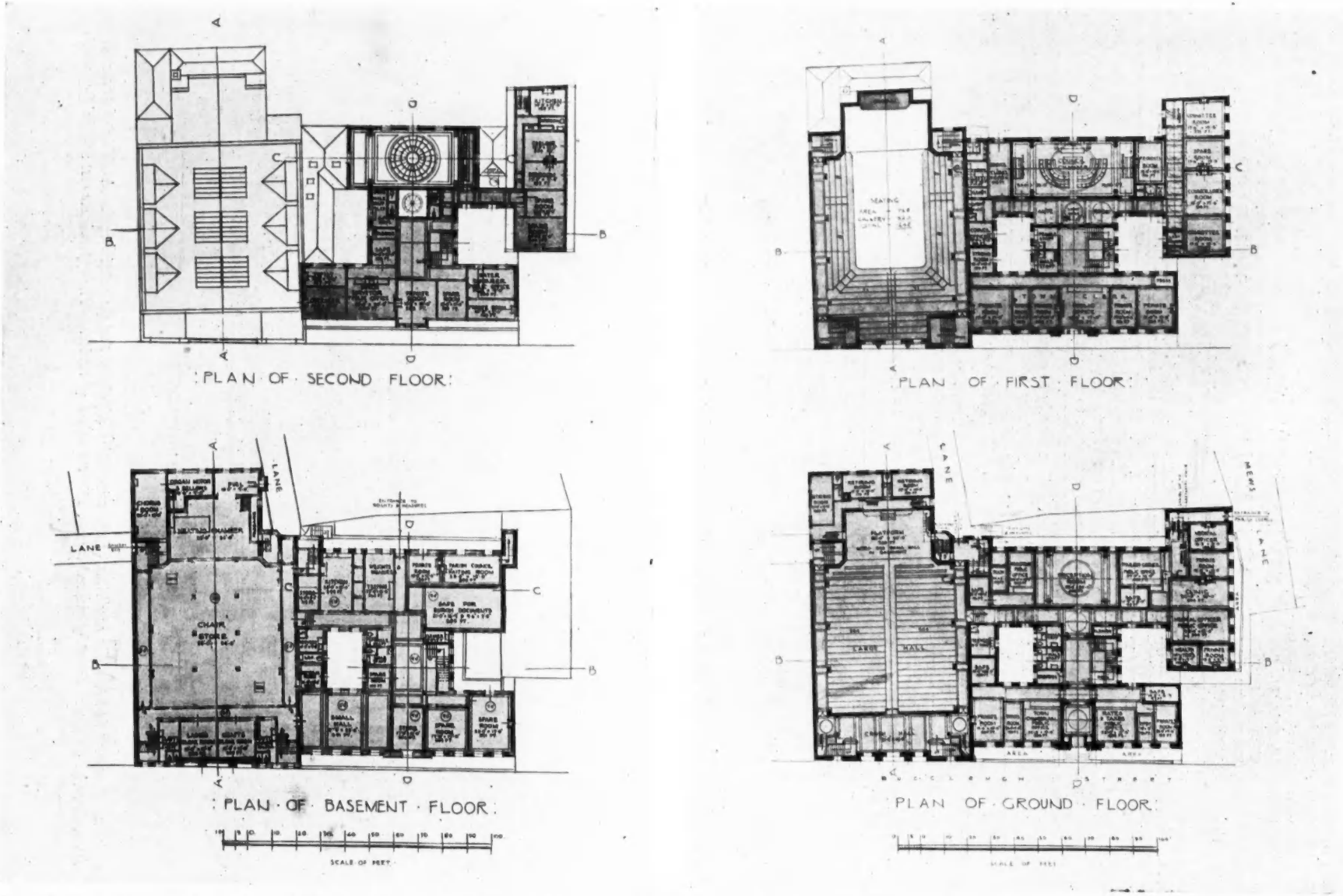
DUMFRIES TOWN HALL COMPETITION

First Premiated Design: By James Carruthers



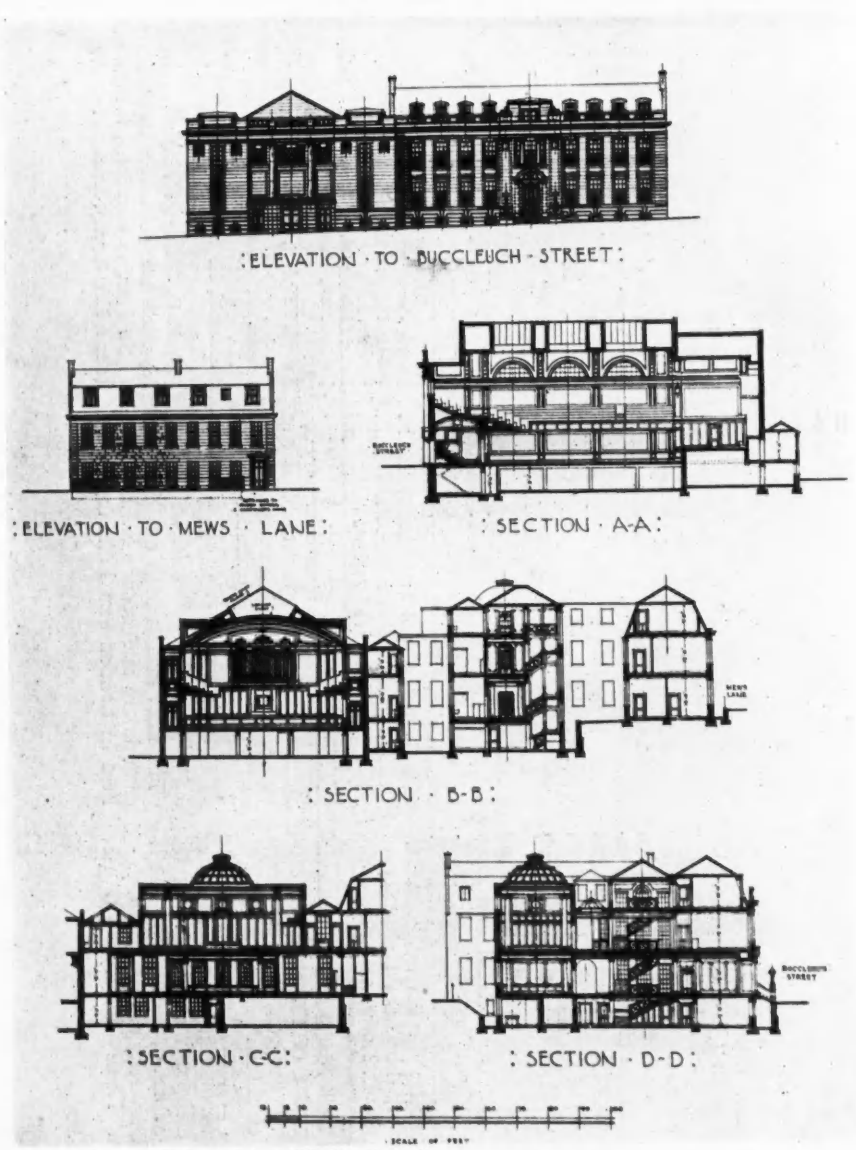
: ELEVATION · TO · BUCCLEUCH · STREET :

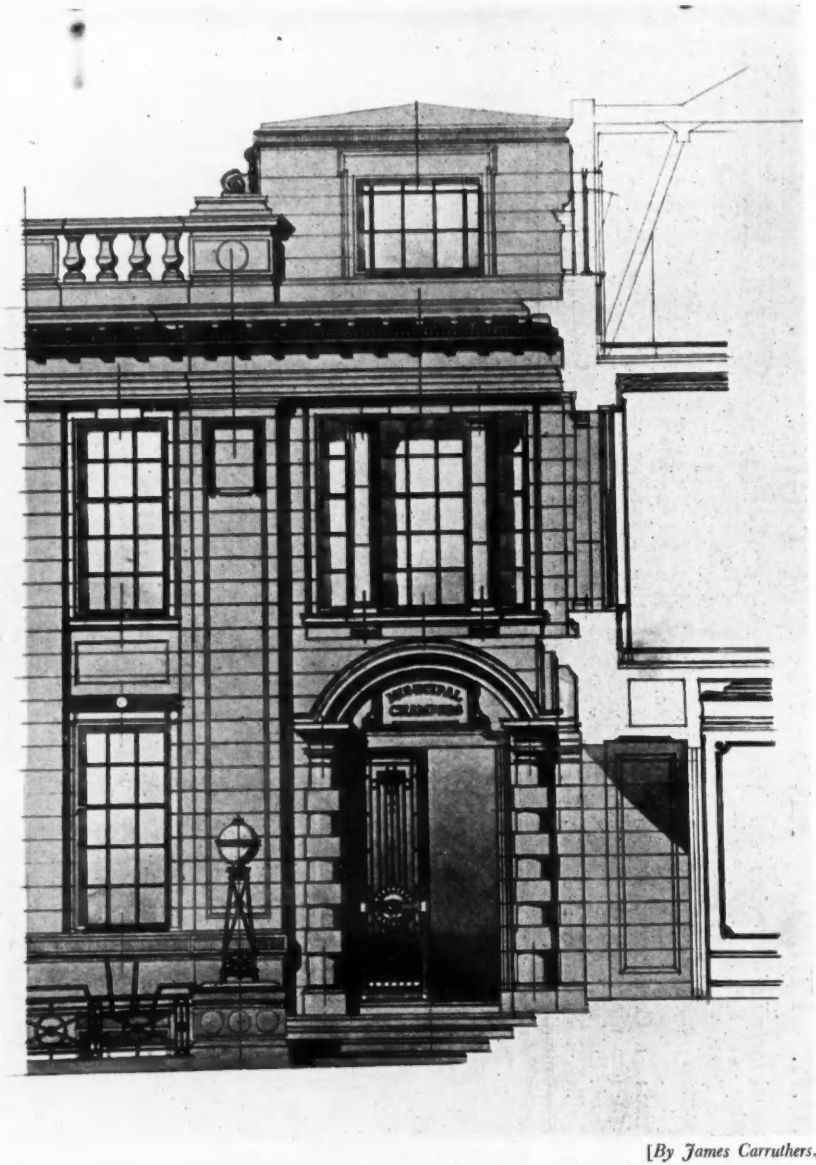
Elevation to Buccleuch Street. The conditions of the competition stipulated that the exterior walls should be of Locharbriggs stone, those to Buccleuch Street of dressed ashlar, and the others of rubble. The approximate cost will be £45,000.



Plans of basement, ground, first and second floors. The accommodation includes a town hall to seat 1,250 persons and provided with stage and retiring-rooms; municipal offices; and a council chamber. The building is to be erected on the site of the old town hall, which was destroyed by fire.

Plans of basement, ground, first and second floors. The accommodation includes a town hall to seat 1,250 persons and provided with stage and retiring-rooms; municipal offices; and a council chamber. The building is to be erected on the site of the old town hall, which was destroyed by fire.





Dumfries Town Hall Competition: Winning Design. [*By James Carruthers.*

Sections and elevations, and detail of main front. The award of the assessor, Sir George Washington Browne, was as follows: First premium, £300, James Carruthers, Glasgow; second premium, £200, Hutton and Taylor, Glasgow; third premium, £100, H. T. Wright, Newcastle-upon-Tyne.

R.I.B.A. PRIZES AND STUDENTSHIPS

The annual award of the prizes and studentships of the R.I.B.A. was announced last week. The names of the successful competitors are as follows :

Tite Prize : a Certificate and £50 for Design (for the study of Italian architecture). Subject, "A Monastery." A. C. Collins, Melbourne, Australia. Honourable mention, E. F. Stacy, Department of Architecture, Northern Polytechnic; H. Banister, Liverpool School of Architecture, University of Liverpool; E. F. Starling, School of Architecture, University of London.

Soane Medallion : a Silver Medal and £150 for Design (for architectural study abroad). Subject, "A Sports Club." J. L. Martin, School of Architecture, Victoria University, Manchester. Honourable mention, S. E. T. Cusdin, Architectural Association, London.

Owen Jones Travelling Studentship and £100 (a Certificate and £100 for the study of ornament and colour decoration). Miss Kathleen A. Veitch, Architectural Association, London.

Royal Institute Silver Medal and £75 for Measured Drawings. Miss Sadie Speight, Manchester University School of Architecture (for measured drawings of "The Organ Screen in Greenwich Hospital Chapel," "Palazzo Municipale, Brescia," "Monte di Pietà, Brescia").

Royal Institute Silver Medal and £50 for an Essay. R. A. Duncan, A.R.I.B.A., Architectural Association, London (for an essay on "Science and the Art of Architecture"). Honourable mention, W. A. Eden, A.R.I.B.A., School of Architecture, University of Liverpool (for an essay on "John Carr, architect, of York, 1729–1807").

Henry Saxon Snell Prize (£100 for travel for the study of improved design and construction of hospitals, convalescent homes, and asylums for the aged and infirm poor). K. H. Read, A.R.I.B.A., the School of Architecture, the Polytechnic, Regent Street, W.1.

R.I.B.A. (Alfred Bossom) Travelling Studentship : Gold Medal and £250 (for the study of commercial architecture in America). Not awarded. Silver Medals : E. Forster, A.R.I.B.A., School of Architecture, University of London; H. B. Rowe, A.R.I.B.A., Newport, Mon.

Grissell Gold Medal and £50 (for the encouragement of the study of construction). Subject, "A Concrete Pavilion on a Pier." Not awarded.

R.I.B.A. Hunt Bursary—£50 (for the encouragement of the study of housing and town planning). T. M. Daniel, A.R.I.B.A., School of Architecture, University of Cambridge.

R.I.B.A. Neale Bursary—£70 (for the encouragement of the study and measurement of old buildings). W. A. S. Cormack, A.R.I.B.A., School of Architecture, Robert Gordon's Colleges, Aberdeen.

Arthur Cates Prize : a sum of £50. Not awarded.

Ashpitel Prize, 1929 (this is a prize of books, value £10, awarded to the candidate who has most highly distinguished himself among the candidates in the Final Examinations of the year). R. H. Brentnall, Royal West of England Academy, Bristol, School of Architecture.

R.I.B.A. Silver Medal for Schools of Architecture recognized for exemption from the Final Examination (this is awarded for the best set of drawings submitted at the annual exhibition of designs by students of Schools of Architecture recognized for exemption from the R.I.B.A. Final Examination). J. L. Martin, School of Architecture, Victoria University, Manchester. Honourable mention, W. Crabtree, School of Architecture, University of Liverpool.

R.I.B.A. Bronze Medal and £5 in Books for Schools of Architecture recognized for exemption from the Intermediate Examination (this is awarded for the best set of drawings submitted by students of Schools of Architecture recognized for exemption from the Intermediate Examination). A. G. Gibson, Architectural Association, London.

R.I.B.A. Prizes for Public and Secondary Schools (these are two prizes of £2 10s. each; one a prize for an essay of not more than 1,000 words, and one a prize for sketches or scale drawings of a building or part of a building. The prizes are offered for competition between boys and girls in Public and Secondary Schools). Prize for Essays : Miss Dorothy Pilgrim, of Notre Dame High School, Battersea. Competitors commended : George Richardson, Birkenhead Institute; A. C. L. Whistler, Stowe School; J. L. Carr, Castleford Secondary School. Prize for Sketches : H. I. Gordon, of Hymers College, Hull. Competitors commended : Raymond Bacon, Grammar School, Great Yarmouth; R. L. Young, Queen Mary's School, Walsall.

The Competition Drawings will be on exhibition in the R.I.B.A. Galleries, 9 Conduit Street, W.1, until January 20, 1930, inclusive, between the hours of 10 a.m. and 8 p.m.; Saturdays, 10 a.m. and 5 p.m. (Sundays excluded).

R.I.B.A. EXAMINATIONS

The Final Examination

The final examination qualifying for candidature as Associate R.I.B.A. was held in London and Edinburgh from December 4 to 12, 1929. Of the seventy-six candidates examined thirty-four passed (nine in Part 1 only) and forty-two were relegated. The successful candidates are as follows :

Boon, Geoffrey M.
Brenchley, Arthur R.
Brentnall, Ralph H.
Bright, George E.
Burrington, Thomas (Part 1 only).
Chaplin, John P. (Distinction in Thesis).
Cox, William J. P.
Dower, John G.
Duncan, David R.
Fisher, Roderick C.
Gillett, Margaret (Part 1 only).
Haskins, Allan D. A.
Johnson, Allan.
Kemp, Sidney J.
Kemp, William C. (Part 1 only).
McMullen, Alexander L.
Marrett, Eric M.
Maynard, Frederick J.
Neil, Charles W.
Orfeur, Ronald F.
Pickering, Charles E. (Part 1 only).
Price, Geoffrey L.
Priest, Alfred L. (Part 1 only).
Rea, Herbert F.
Robinson, Aubyn P.
Saunders, Victor C. L. (Part 1 only).
Segar-Owen, Godfrey J. S.
Shaw, Robert.
Shepherd, George H.
Soper, Stephen F. (Part 1 only).
Steele, Frank R.
Tassell, George E.
Thomas, Thomas W. (Part 1 only).
Wakeham, Philip O. G. (Part 1 only).

The Special Examination

The special examination qualifying for candidature as Associate R.I.B.A. was held in London and Edinburgh from December 4 to 10, 1929. Of the twenty candidates examined, six passed (one in Part 1 only) and fourteen were relegated. The successful candidates are as follows :

Duffy, Thomas.
Harris, Robert O. (Part 1 only).
Stanley, Leslie S.
Taylor, George S.
Wakelin, Richard N.
Young, William E.

The Examination in Professional Practice for Students of Schools of Architecture recognized for exemption from the R.I.B.A. Final Examination

The examination was held in London and Edinburgh on December 10 and 12, 1929. Of the sixty-seven candidates examined forty-four passed and twenty-three were relegated. The successful candidates are as follows :

Ashwell, Harold J.
Baillie, Ian.
Boger, Robin C. D.
Bradbury, Ronald.
Butler, Ronald McC.
Carr, David.
Carter, Edward J.
Cassells, George A.
Cowin, John N.
Cusdin, Sidney E. T.
Ellis, Harold H.
Freeth, Evelyn.
Grayson, Arthur B.
Harris, Leonard D.
Hillier, Norman B.
Hughes, John L.
King, Elizabeth S.
Kininmonth, William H.
Lavers, Ralph S.
Linfield, Guy R.
Macdonald, Alfred I. D.
Macdonald, Hugh S.
Martin, John L.
Matthew, Robert H.
Murray, James M.
Nisbet, John A. V.
Patker, Vithal M.
Penn, William H. M.
Phillipson, Beatrix J.
Porter, Herbert G.
Richards, James M.
Ross, Hugh M.
Roth, Stanley H. J.
Scott, Robert D.
Smeed, Charles W. J.
Smith, Charles H. B.
Smith, James.
Somake, Ellis E.
Sutherland, Stephen.
Tanton, Hubert J.
Webster, Patricia B.
Westerman, Albert E.
Wheeler-Carmichael, Samuel D.
Wilkinson, Harold H.

Mr. E. D. O'Connor, A.R.I.B.A., has moved his offices from 58 London Road, Leicester, to St. Martin's Chambers, 8 New Street, (also 2 New Street), Leicester.

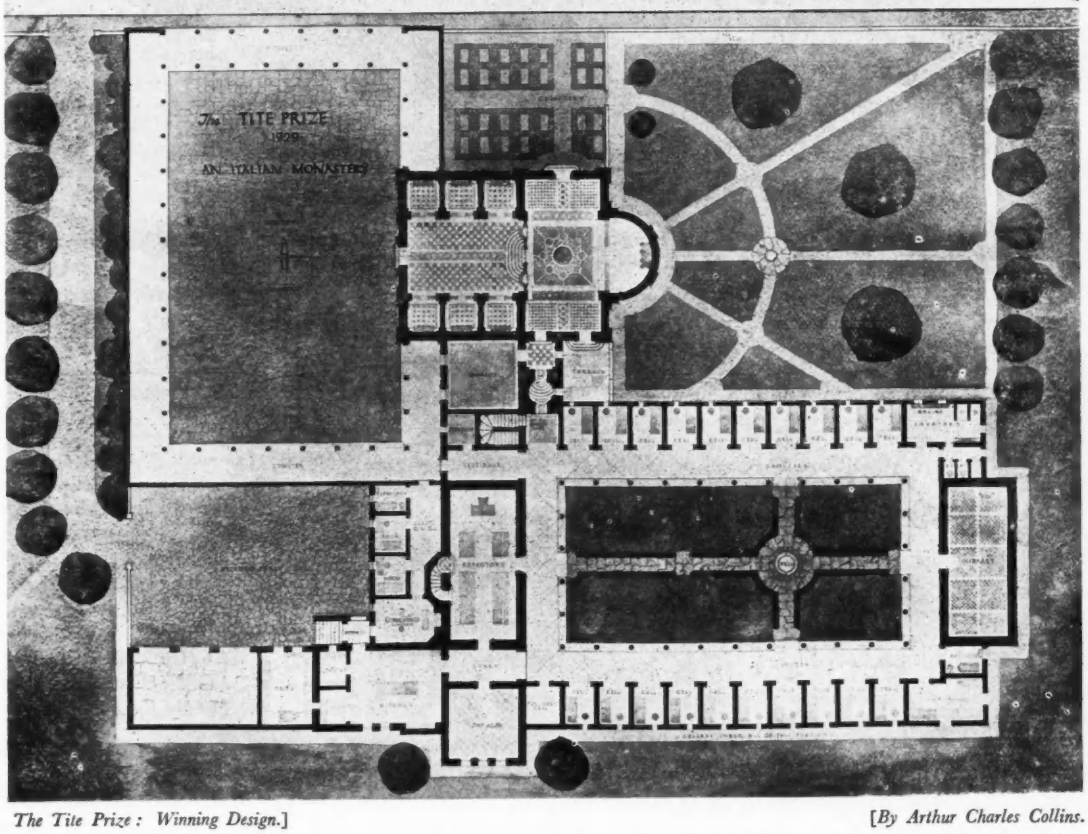


Elevation from road



Elevation from Outer court

AN ITALIAN MONASTERY



The Tite Prize: Winning Design.] [*By Arthur Charles Collins.*

The subject set for the Tite Prize this year was a monastery. The winning of the prize by a young Australian architect is a direct result of the reform recently instituted by the R.I.B.A., whereby it has been made possible for Dominion architects to compete on equal terms with architects in Great Britain. For full list of awards see facing page.

THE ARCHITECTURAL REVIEW

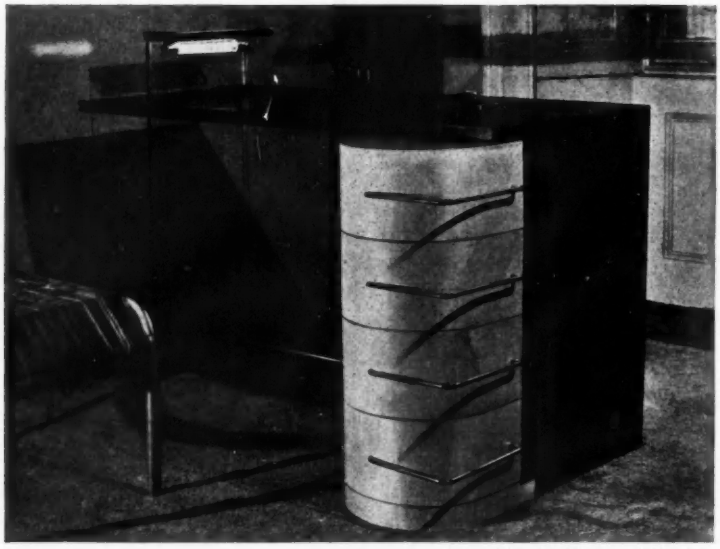
"On the subject of furnishing a modern house there are two problems to consider: the problem of compromise with things as they are and the problem of creating a new thing." Thus writes Paul Nash in the January issue of *The Architectural Review* in an article on "Modern English Furnishing." One of the many illustrations of modern furniture which accompanies the article is reproduced on this page.

A description of Greatwood Hall, Lincolnshire, by Mr. Darcy Braddell, is published, together with illustrations and plans of the building.

The series of articles on "A History of the English House" is continued by Mr. Nathaniel Lloyd, and deals with the late seventeenth and early eighteenth centuries, with special reference to Sir Christopher Wren.

Mr. Raymond McGrath has contributed an article entitled "Light Opera," which is interspersed with illustrations of the Savoy Theatre.

There are many other illustrations in the *Review*, including a photograph and measured drawing of Newcastle House, Lewes.



[*From* The Architectural Review.

A desk in Coromandel and sycamore woods with a fixed strip light. The desk has one glass leg. Designed by Denham Maclaren.

COMPETITION NEWS

The R.I.B.A. announce: "The Competitions Committee desire to call the attention of members to the fact that the conditions of the competitions for the proposed new school, London Road, King's Lynn, for the proposed pleasure resort, Gosport, for the Ongar (War Memorial) Cottage Hospital, and for the Blomfield R.D.C. House Plans Competition, are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in these competitions."

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Commercial Union Offices, Cornhill (pages 119–124). General contractors, Trollope and Colls, Ltd. Sub-contractors: Redpath, Brown & Co., Ltd., steelwork; F. J. Barnes, Ltd., stonework; Geo. Rome & Co. (London), Ltd., plastering; Sulzer Bros., heating and ventilation; A. Williams & Co., wells; Haywards, Ltd., pavement lights and steel stairs; May Construction Co., Ltd., acoustic plaster; J. R. Pearson (Birmingham), Ltd., roof railing; Crittall Manufacturing Co., Ltd., steel windows; Diespeker & Co., Ltd., floor construction; Leeds Fireclay Co., Ltd., exterior wall tiling; Milner's Safe Co., Ltd., strong-room door; Leyland and Birmingham Rubber Co., Ltd., rubber paving; Art Pavements and Decorations, Ltd., Biancola wall linings; Purcell and Nobbs, kitchen equipment; Hollis Bros. & Co., Ltd., wood block flooring; Bratt Colbran & Co., Ltd., fireplaces; James Gibbons, Ltd., and Carter and Aynsley, Ltd., ironmongery; Waygood-Otis, Ltd., lifts; G. A. Harvey & Co. (London), Ltd., steel fittings; J. A. Lawford & Co., asphalt; Sturtevant Engineering Co., Ltd., vacuum cleaning.

Metropole Cinema, Victoria (pages 143–144). General contractors, Holliday and Greenwood, Ltd. Clerks of works, W. D. Mackenzie and E. Lathey. Sub-contractors: London Brick Co. and Forders, Ltd., 1,500,000 Phorpres Flettons bricks; Anselm Odling and Sons, Ltd., marble work; British Vacuum Cleaner and Engineering Co., Ltd., vacuum cleaner plant; Frank Burkitt, fire curtain and hydrants; Burn Bros., Ltd., sewage pumping-plant; Carter & Co., London, Ltd., tiling; J. Starkie Gardner, Ltd., decorative metalwork and balustrading; Haywards, Ltd., pavement lights; Siegwart Fireproof Floor Co., Ltd., pre-cast concrete roof; W. James & Co., Ltd., metal sashes and lantern light; Braby & Co., Ltd., metal ducts; H. Lazarus and Son, Ltd., seats, curtains, etc.; Leyland and Birmingham Rubber Co., Ltd., rubber flooring; E. Pollard & Co., Ltd., steel shutters; Rubery, Owen & Co., Ltd., steelwork; the Berkeley Electrical Engineering Co., Ltd., electrical work; J. W. Gray and Son, lightning conductors; Western Electric Co., Ltd, talking apparatus; B. Finch & Co., Ltd., sanitary goods.

Two houses, Hampstead Garden Suburb (pages 146–147). General contractors, Garsubil, Ltd. Sub-contractors: Keele Tileries, tiles; Falkirk Iron Co., grates; Wood, Russell & Co., Ltd., Sentry No. 1 boilers; Woodworkers, Ltd., joinery and mantels.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated, readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

39556. Dunn, E. M. Building blocks. December 27.

39682. King, T. F. Reinforced blocks, etc. December 28.

39900. James Manufacturing Co. and White, A. E. Building structures. December 31.

SPECIFICATIONS PUBLISHED

323002. Concrete, Ltd., Ambrose, J. G., and Mathews, C. B. Concrete slabs or monoliths for the floors or ceilings of buildings and the like, and the method of producing and applying same.

321435. Palmer, H. S. Building blocks.

Messrs. Lewis Berger and Sons, Ltd., are giving a demonstration of new decorative materials at the Clarence Hotel, North Street, Brighton from January 20 till 22 inclusive (10 a.m. till 6 p.m.).

THE METROPOLE CINEMA, VICTORIA, S.W.

DESIGNED BY GEORGE COLES

THE Metropole Cinema has its main entrance in Victoria Street, immediately opposite the Victoria Station Underground Arcade. The auditorium is situated in Brewer Street, its longer axis being parallel to that street. The interior is designed and decorated in a freely-rendered Spanish Renaissance manner. Painted ceilings and textured wall surfaces characteristic of this style have been introduced in the vestibule, staircases, corridors and waiting spaces. Red onyx, Sienna marble, Portuguese skyros, coloured Spanish tiles and Spanish wrought ironwork assist the decorative effect of these rooms.

Fibrous plaster is the principal decorative material of the auditorium. Special attention had to be given to the design of the numerous grilles and bands of pierced ornament which the low-velocity downward heating and ventilating system demanded. The lower portions of the auditorium walls are panelled in walnut and the colour of this material has given the keynote for the general colour scheme of the hall, which consists of rich browns, orange, rose and gold, enlivened by a more sparing disposition of the primary colours. The modelled ornament of the proscenium frame is in gold on a background of bronze green. The curtains and hangings are also in gold and have been specially considered in relation to the elaborate decorative lighting effects which it is desired to use.

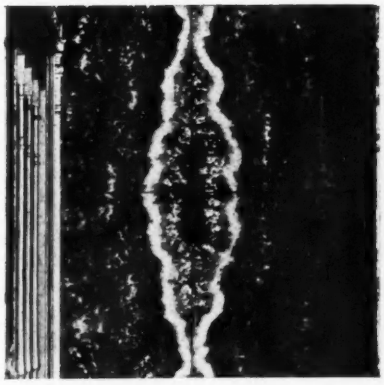
The organ chamber is placed in the roof, centrally on the long axis of the auditorium, the decorative organ console being on a lift so that it may be raised or lowered at will.

It was decided by the architect, Mr. George Coles, F.R.I.B.A., and the consulting engineer, Mr. E. W. Cook, A.M.I.C.E., M.I.STRUCT.E., to construct the cinema as an entirely steel-framed structure. A programme of work and strict time-table were prepared, agreed to, and ultimately adhered to by the various contractors. The order was placed on March 20, 1929, and the programme laid down allowed for all trades to complete their work and the cinema to be opened to the public on Boxing Day, December 26, 1929.

The main walls are composed of steel stanchions and beams supporting brickwork panels, the stanchions being arranged to support the roof girders and other heavy loads from the circle steelwork, etc., as required. The steelwork called for most accurate setting, as the main outer walls of the auditorium are not parallel, neither are they straight in themselves; moreover, on three sides the cinema butted up to existing buildings.



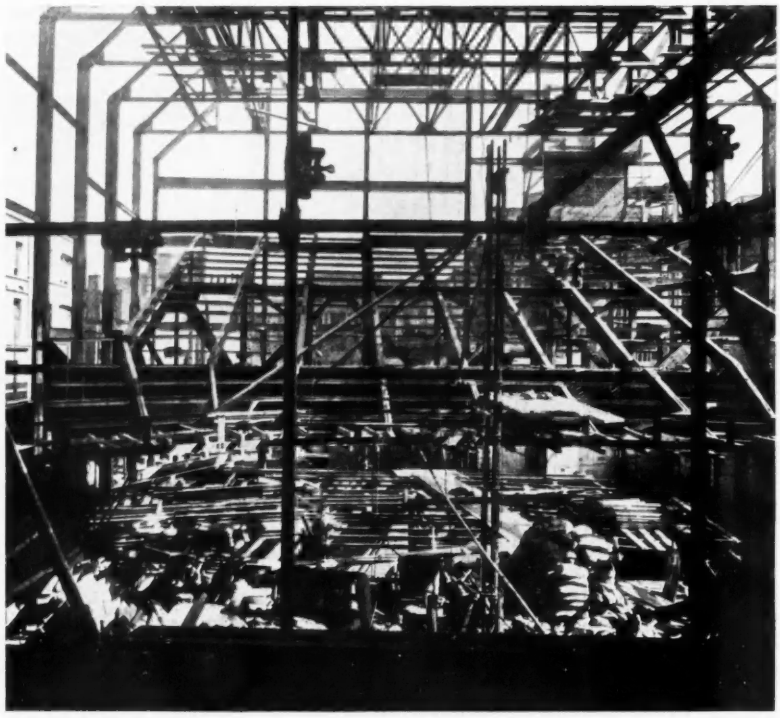
The façade to Victoria Street. It is the only building in London entirely faced with marble. The front is in Red African onyx, with dressings of white Piastra and yellow Sienna.



A "close up" view of a portion of the Red African onyx marble facing on the exterior of the main entrance.

The roofing is carried out in patent concrete tiles, asphalted over, and is supported on seven main roof girders of varying spans of about 82 ft. These weigh nine tons each. Connected to the top booms of these lattice girders are the secondary beams required for the concrete roof, and to the bottom booms the steel framing of R.S.J., tee and rod construction for the plaster work, which was carried out *in situ*.

A concrete floor is provided between two of the trusses at the proscenium end for the organ chamber in the roof. The steel framing for the plaster work required skilful workmanship, especially at the proscenium end, where it is curved both ways to follow the lines of the plaster.



A photograph of the steelwork. The contract was placed on March 20, 1929, and a programme of work was formulated to allow all trades to complete, and the cinema to be opened to the public, on December 26, 1929. The total weight of steelwork used, which was of British manufacture throughout, was approximately 550 tons.

There are two main girders, 81 ft. span, supporting the circle steelwork. One is of the lattice type, and the other of the plate girder type. These girders weigh nearly 30 tons each. Steel framing for a feeder passage and waiting-room is supported from the underside of the rakers, and here again great care was necessary with the intricate steelframing for the plaster work. The stage roof is framed to suit the lantern lights; and the grid, which is slung from the roof steel, is spaced suitably for the lifting gear operating the scenery. Practically the whole area of the grid is covered with a steel platform composed of small channels spaced at 5-in. centres.

The auditorium floor is curved and sloped immediately under the circle. It is steel framed for the total width of the cinema and a length of 35 ft., as the boiler house and plenum chamber are beneath it. The entrance hall is approximately at right angles to the theatre, and leads from Victoria Street. This is also steel framed, solid steel columns being used, with usual girders to floors. The restaurant over has a pitched roof, the main ties of the roof trusses being made semi-circular and framed to suit laylights and plaster. All the joints of the stanchions and bearing surfaces of steelwork were carefully machined, and all main connections site riveted.





Metropole Cinema, Victoria] *[By George Coles.*

The tea room; and the auditorium, looking towards the proscenium and one of the boxes. The building is of the combined theatre and cinema type, the stage being entirely equipped for the presentation of variety or dramatic performances. Seating is for about 2,000 persons, of whom 830 are accommodated in the balcony.

THE ARCHITECTS' DIARY

WEDNESDAY, JANUARY 15

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Quality in Pottery." By Joseph Burton, A.R.C.SC.I. Professor H. E. Armstrong, PH.D., LL.D., D.SC., F.R.S., will preside. **8 p.m.**

L.C.C. CENTRAL SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. Continuation of a course of twenty-four lectures on the History of Architecture (Part I, Ancient). By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND. Gloucestershire Branch, and the Gloucester Architectural Association. At the Municipal Art Gallery, Cheltenham. Exhibition of architectural drawings, including photographs and models. Until January 29. 10 a.m. till 5 p.m. (Wednesdays and Saturdays, 10 a.m. to 8 p.m.) **10 a.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, S.W.1. Informal Meeting. "Developments in Transportation by Cableways." By Professor Stephen Mitchell Dixon, M.A., B.A.I., M.INST.C.E. Mr. Thomas Henry Bailey will take the chair. **6 p.m.**

THURSDAY, JANUARY 16

WEST YORKSHIRE SOCIETY OF ARCHITECTS. At the Leeds College of Art, Vernon Street, Leeds. "Modern Tendencies in Architecture, Furniture, and Lighting Design." By G. S. Francis. (Lantern Illustrations.) **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Hampshire Sub-Centre. At University College, Southampton. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. **7.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Italian Maiolica." By Bernard Rackham, F.S.A. **5.30 to 6.30 p.m.**

FRIDAY, JANUARY 17

ARCHITECTURE CLUB. A Supper-Discussion Meeting will be held at the Architectural Association, 34 Bedford Square, W.C.1. Topic: "The Charing Cross Bridge Scheme." 7.45 for 8 p.m. **8 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Smoking Concert to be held at Carr's Restaurant, 264 Strand, W.C. Tickets may be obtained from the Secretary.

LONDON SOCIETY. At the Royal Society of Arts, 18 John Street, Adelphi, W.C.2. "London's Parks and Open Spaces." By F. W. Parker, F.S.I. **5 p.m.**

SATURDAY, JANUARY 18

Sunrise, 7.57 a.m. Sunset, 4.24 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to Tower Bridge. Meet at Superintending Engineers' Office, Tower Bridge, at 2.30 p.m. **2.30 p.m.**

UNIVERSITY COLLEGE, Oxford. Conference in the Hall. The Rt. Hon. H. A. L. Fisher, F.R.S., P.B.A., will preside. Exhibition of drawings by P. Wilson Steer, Sir Charles Holmes and Gilbert Spencer, open from 2 p.m. Tea 4.30 p.m. **2 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. Annual Dinner at the Midland Hotel, Birmingham.

MONDAY, JANUARY 20

R.I.B.A., 9 Conduit Street, W.1. General Meeting. President's Address to Students. Criticism by W. H. Ansell, F.R.I.B.A., on work submitted for Prizes and Studentships. Presentation of Prizes. **8.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. South Midland Centre. At the University, Edmund Street, Birmingham. "Voltage Control of Large Alternators." By H. W. Taylor. **7 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." (Lecture I.) By Harold J. L. Wright. **8 p.m.**

TUESDAY, JANUARY 21

KING'S COLLEGE, Strand, W.C.2. Department of Civil Engineering. First of a course of three lectures on "Bridges and Bridge-Construction." By C. H. Lobban, D.SC., A.M.INST.C.E. **5.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. East Midland Sub-Centre. At the College, Loughborough. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched Arc Switch." **6.45 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. "Early Renaissance Sculpture." By L. O. Faraker. **12 noon.**

ILLUMINATING ENGINEERING SOCIETY. At the Royal College of Music, Prince Consort Road, South Kensington, S.W.7. "The Art of Stage Lighting." By C. Harold Ridge. Light refreshments at 6.30 p.m. **7 p.m.**

WEDNESDAY, JANUARY 22

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Architectural Lighting." By R. W. Maitland. **8 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the Savoy Hotel Laundry, 19 Union Road, Clapham Road, S.W. **2.30 p.m.**

THURSDAY, JANUARY 23

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. At Birmingham. "Modern Improvements in Resistance Welding Machines." By C. A. Hadley.

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Setting out and erection of Multiple Story Buildings." Informal Discussion to be opened by G. F. C. Caswell. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Italian Sculpture of the Renaissance." By Eric Maclagan, C.B.E., F.S.A. **5.30 to 6.30 p.m.**

FRIDAY, JANUARY 24

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. Ordinary Meeting. At the Chamber of Commerce Buildings, New Street, Birmingham. "New Underground Railway Offices, St. James's Park—Notes on Foundation and Erection." By M. J. C. McCarthy, A.M.INST.C.E. **6.30 p.m.**

SATURDAY, JANUARY 25

Sunrise, 7.50 a.m. Sunset, 4.36 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Second of Series of Six Non-Technical Lectures on Present-Day Architecture. "The House You Want." By R. Randal Phillips, Hon. A.R.I.B.A. **3 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS. Visit to London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, W.C.1. Meet at Main Entrance at 2.45 p.m. **2.45 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to Sion College, Victoria Embankment, E.C.4. **2.30 p.m.**

MONDAY, JANUARY 27

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Some Aspects of Contemporary Continental Decoration." (Lantern Illustrations.) By J. M. Holmes. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." By Harold J. L. Wright. (Lecture II.) **8 p.m.**

KING'S COLLEGE, London, W.C.2. Faculty of Arts. First of a course of nine public lectures to be held every Tuesday on "Italian Painting." By Percy Dearmer, M.A., D.D., HON. A.R.I.B.A. **5.30 p.m.**

TUESDAY, JANUARY 28

KING'S COLLEGE, Strand, W.C.2. Department of Civil Engineering. Second of a course of three lectures on "Bridges and Bridge-Construction." By C. H. Lobban, D.SC., A.M.INST.C.E. **5.30 p.m.**

THURSDAY, JANUARY 30

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Canaletto and Eighteenth-Century Venetian Landscape." By W. G. Constable, F.S.A. **5.30 to 6.30 p.m.**

SATURDAY, FEBRUARY 1

Sunrise, 7.40 a.m. Sunset, 4.49 p.m.

MONDAY, FEBRUARY 3

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." By Harold J. L. Wright. (Lecture III.) **8 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Business Meeting. Election of Members. **8 p.m.**

TUESDAY, FEBRUARY 4

KING'S COLLEGE, Strand, W.C.2. Department of Civil Engineering. Last of a course of three lectures on "Bridges and Bridge-Construction." By C. H. Lobban, D.SC., A.M.INST.C.E. **5.30 p.m.**

THURSDAY, FEBRUARY 6

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. At the Hotel Cecil, Strand, W.C. Annual Dinner and Reunion of the Institution. No tickets will be issued after Monday, January 27. 7 for 7.30 p.m. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "The Raphael Cartoons." By A. P. Oppé. **5.30 to 6.30 p.m.**

SATURDAY, FEBRUARY 8

Sunrise, 6.32 a.m. Sunset, 5.51 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Third of a Series of Six Non-Technical Lectures on Present-Day Architecture. "The Creation of a Garden City." By Louis de Soissons, O.B.E., F.R.I.B.A., S.A.D.G. **3 p.m.**

MONDAY, FEBRUARY 10

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Automatic Control in Heating and Air Conditioning Installations." By B. T. Wingfield. Light refreshments at 6.30 p.m. **7 p.m.**

TUESDAY, FEBRUARY 11

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. First of a course of three lectures on Electrical Transmission by Overhead Lines. (1) "The Mechanical Aspects of Overhead Transmission Lines, including Conductors, Insulators and Supports." By Charles W. Marshall, B.SC., M.I.E.E. **5.30 p.m.**

THURSDAY, FEBRUARY 13

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Welding." By Major James Caldwell, M.INST.C.E. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Early Italian Engravings." By Professor A. M. Hind, O.B.E., F.S.A. **5.30 to 6.30 p.m.**

SATURDAY, FEBRUARY 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to the Home Office Industrial Museum, Horseferry Road, Westminster, S.W.1. Meet at entrance. **2.15 p.m.**

MONDAY, FEBRUARY 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "The Thames Valley Preservation Scheme." By Professor Patrick Abercrombie, M.A., F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture I.) **8 p.m.**

TUESDAY, FEBRUARY 18

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Second of a course of three lectures on Electrical Transmission by Overhead Lines. (2) "Electrical Characteristics of Lines, Resistance, Inductants, Capacitance, Effects of Atmospheric Conditions on Insulation." By Charles W. Marshall, F.SC., M.I.E.E. **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. General Discussion on "Problems in Illuminating Engineering." Light refreshments at 6.30 p.m. **7 p.m.**

WEDNESDAY, FEBRUARY 19

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. Cantor Lecture, "Alfred Stevens: Architect-Sculptor-Painter." **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Honan Night. "Modern Architecture of Sweden." By B. B. Lewis.

THURSDAY, FEBRUARY 20

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Italian Furniture." By H. Clifford Smith, F.S.A. **5.30 to 6.30 p.m.**

FRIDAY, FEBRUARY 21

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Royal Observatory, Greenwich." By Sir Frank Dyson, Astronomer Royal. **5 p.m.**

SATURDAY, FEBRUARY 22

Sunrise, 6.0 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Fourth of a Series of Six Non-Technical Lectures on Present-Day Architecture. "Decoration and Furnishing." By G. G. Wornum, F.R.I.B.A. **3 p.m.**

TUESDAY, FEBRUARY 25

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Last of a course of three lectures on Electrical Transmission by Overhead Line. (3) "Typical Transmission Lines in use in Great Britain: Characteristic Features of Low, Medium and High Voltage Construction." By Charles W. Marshall, B.SC., M.I.E.E. **5.30 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

Shops and flats are to be erected on the site of 42, 43, 44 and 45 St. Mary Abbot's Terrace, KENSINGTON, to abut also upon Holland Road.

The London Electric, Metropolitan, District, Central London and City and South London Railway Companies Bill provides for the construction of a subway along the centre of Brompton Road, KENSINGTON, from a point about 30 yards west of Hooper's Court to a point just east of Hans Crescent, and for the construction of an underground booking-hall at the intersection of Brompton Road and Hans Crescent.

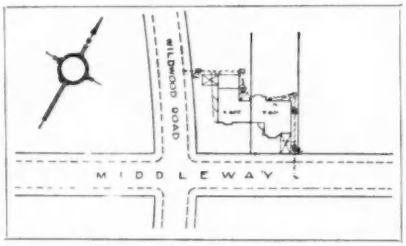
SOUTHERN COUNTIES

The EASTBOURNE Corporation Housing Committee is acquiring twenty-three acres of land for housing purposes.

The EASTBOURNE Corporation Sanitary Committee has received sanction to borrow £9,472 for the erection of Turkish baths.

Plans passed by the EASTBOURNE Corporation: House, junction of Northlam and Combe Road, for Mr. C. M. Wood (architect); two houses, Brodrick Road, Hampden Park, for Messrs. W. J. Cole and Sons; two houses, Victoria Drive, for Mr. A. Ford (architect); two houses, Brodrick Road, Hampden Park, for Messrs. A. and W. Kennett; alterations, 28–30 Seaside Road, for Mr. J. C. Bowley (architect), on behalf of Eastbourne Water Works Co.; house, Pashley Road, for Mr. H. H. Ford (architect), for Bexleigh Estates, Ltd.; addition to garage premises for the Southdown Motor Services, Ltd., Royal Parade; additions, Beachy Head Hotel, and additions to refreshment house, Victoria Drive, for Messrs. P. D. Stonham and Son (architects); two houses, Victoria Drive, for Mr. F. C. Benz (architect); house, Park Avenue, for Mr. C. Ford (architect); house, King's Avenue, for Mr. J. Nethercott; alterations and additions, "Arlington Arms," Seaside, for Mr. A. Ford (architect); house, Willingdon Road, for Mr. C. M. Wood (architect); alterations and additions, Sussex Stores, Terminus Road, for Mr. R. O. Slipper (architect); four houses, Fitzmaurice Avenue, for Mr. A. Ford (architect); alterations, 228 Seaside, for Mr. A. Ford (architect); depot premises, Moy Avenue, for Shell Mex, Ltd.; workshop, Fort Road, for Mr. G. E. Holditch (architect); ten houses, St. Anthony's Avenue, for Messrs. Scales and Baker (architects).

The OXFORD Corporation Housing Committee recommends the erection of fifty houses to re-house the people in cottages belonging to the Council, which are for the most part incapable of satisfactory repair within reasonable limits of expenditure.



Block plan of two houses, Hampstead Garden Suburb, illustrated below. Wildwood Road has been renamed Thornton Way.

The OXFORD Corporation is being asked to consider, in view of the necessity for a southern approach worthy of the city, to decide its policy with regard to that portion of St. Aldate's Street site remaining unpurchased or built upon. The Corporation is also being asked to consider the establishment of a public abbatoir for the city of Oxford.

Plans passed by the OXFORD Corporation: House, Victoria Road, for Mr. T. Walker; two houses, Botley Road, for Mr. S. L. Turner; house, George Street, Summertown, for Messrs. H. Martin and Son; house, Temple Street, Cowley, for Mr. P. J. Morris; house, Capel Close, for Mr. H. Thomas; house, Bickerton Road, Headington, for Messrs. Knowles and Son, Ltd.; house, Old Road, Headington, for Messrs. Benfield and Loxley; house, George Street, Summertown, for Messrs. Hunt and Church; two houses, Abingdon Road, for Mr. J. Laitt; house, Sandfield Road, for the Manor Estate Co.; two houses, Latimer Road, Headington, for Mr. H. Simmons.

SOUTH-WESTERN COUNTIES

The County Education Committee has acquired a site at CHELTENHAM for the proposed new premises for the Cheltenham Grammar School.

Plans passed by the CHELTENHAM Corporation: 102 houses, Pilley Crescent (amended plan), for Cheltenham Corporation; house, Hales Road, for Capt. J. L. Richardson; shop, Inkerman Gardens, Lansdown Road, for Mr. O. H. Goulding; additions, Hatherley Inn, Hatherley Road, for the Original Brewery Co.; two houses, Malvern Street, for the Cheltenham Corporation; bungalow, Longwood, Cleeve Hill, for Col. Aiken; house, West Approach Drive, Pittville, for Miss R. Armitage; house, Tewkesbury Road, for Mr. D. H. Neems; house, Prestbury Road, for Mr. J. Allen.

EASTERN COUNTIES

The Essex C.C. is being asked to instruct the county architect to complete, by direct labour, the construction of the new office building at CHELMSFORD.

The Essex Education Committee has obtained a site at GRAYS for the erection of a junior school.

The Essex Education Committee has passed amended plans for the provision of a senior school in Malvern Road, HORNCHURCH, to provide accommodation for 400 scholars, at an estimated cost of £18,756.

The Essex Education Committee has prepared sketch plans for the provision of 210 additional places at the LAINDON High Road council school, together with a building of light construction consisting of a full-size handicraft and domestic subjects room and two special classrooms for general practical work, at an estimated cost of £8,874.

The Essex Education Committee has acquired a site of five acres of land at ROCHFORD, for the erection of a central school.

The Essex Education Committee has acquired premises in Eastern Road, ROMFORD, for use as the district education offices.

MIDLAND COUNTIES

The BIRMINGHAM Corporation has acquired sites in Pershore Road, Cotteridge, and College Road, Warren Farm, for the erection of two branch banks.

The BIRMINGHAM Corporation Housing Committee proposes to erect further shops on housing estates at a cost of £51,000.

The BIRMINGHAM Corporation is to carry out a sewerage scheme for the Perry Village district, at a cost of £46,000.

The BIRMINGHAM Corporation has prepared a scheme for laying out land at Pype Hayes as a golf course at a cost of £7,500.

The BIRMINGHAM Corporation is to arrange for the provision of water supply to the Perry Bar area, at a cost of £27,250.



Two houses at the junction of Thornton Way and Middleway, Hampstead Garden Suburb. Designed by C. G. Butler. The walls are of brick, and wood casement windows have been fitted. The roof is covered with hand-made sand-faced tiles. Both houses are provided with garages, which can be seen on the extreme right and left of the picture.

The BIRMINGHAM Corporation is to carry out a sewerage scheme for the Perry Bar district, at a cost of £204,000.

The BIRMINGHAM Corporation is to seek sanction to a loan of four millions for housing.

The BIRMINGHAM Corporation is to extend the waterworks, chiefly in connection with the development of housing estates, at a cost of £200,000.

The BIRMINGHAM Corporation recommends an expenditure of an additional £300,000 for the augmentation of the Elan water supply.

The BIRMINGHAM Corporation has prepared a scheme for widening the Aldridge Road at Perry Bar, and the construction of a new bridge across the River Tame, at a cost of £86,000.

The BIRMINGHAM Corporation has made the following contracts for the erection of houses: 874 non-parlour, 28 four-bedroom type, and 352 three-bedroom type, on the Warren Farm estate, Messrs. W. J. Simms, Sons and Cooke, Ltd.; 216 parlour and 168 non-parlour at Harborne Estate, Housing, Ltd.; four shops and houses, Bordesley Green, Mr. B. S. White; three shops, Yardley Wood Road, Mr. E. M. Squire; eighteen houses, Acocks Green, and thirty-four, Billesley Common, Mr. C. Hougham; eighteen houses, Yardley estate, Messrs. George Smith (Birmingham), Ltd.; 127 houses, Stockland Green estate, Messrs. Morris, Jacombs and Sons, Ltd.; nine shops and houses, Yardley Wood, Mr. George Stubbings.

The COVENTRY Corporation Gas Committee is to provide a ring gas main, with feeder mains, round the city, at a cost of £110,000.

The COVENTRY Corporation is to erect 286 houses on the Hill Farm estate at an estimated cost of £86,600.

The COVENTRY Corporation Markets Committee has prepared a scheme for the construction of an arcade at the Smithford Street entrance to the Barracks, at a cost of £38,500.

The NORTHAMPTON Corporation has prepared a scheme for the construction of a main outfall sewer and sewage works, at a cost of £105,000.

Plans passed by the NORTHAMPTON Corporation: Extensions to dairy, Ransome Road, for Northampton Co-operative Society, Ltd.; house, Forfar Street, for Mr. Barker; house, Forfar Street, for Mr. Oliver; house, Forfar Street, for Mr. Wilcox; house and shop, Birchfield Road, for Mr. P. H. Staughton; house, Holdfield Way, Weston Favell, for Mr. F. F. Ironside; house, Buttocks Booth Lane, for Mrs. M. V. Agutter; house, Buttocks Booth Lane, for Mr. J. R. Revitt; reconstruction of shop, 16–20 Gold Street, for Messrs. Montague Burton, Ltd.; three houses, Ardington Road, for Northampton Co-operative Society, Ltd.; extension to boot and shoe factory, Barry Road, for Messrs. J. Sears & Co., Ltd.; boiler house and chimney, Ransome Road, for Northampton Co-operative Society, Ltd.; four garages and one house, Brookland Road, for Mr. C. H. Rainbow; house and shop, Birchfield Road, for Mr. P. H. Staughton; extension of cinema hall, Alcombe Road and Grove Road, for Mr. Norfolk.

NORTHERN COUNTIES

The BIRKENHEAD Education Committee has approved sketch plans for the provision of a central school on the Tollemache Road site, and for the extension of the Temple Road central school.

Plans passed by the BIRKENHEAD Corporation: Extensions, Commercial garage, abutting on Beckwith Street; extensions to block printing workshop at tapestry works, Stanley Road; power pump house and re-erection of building, British Petroleum Co.'s depot, Corporation Road; alterations and additions, rear of house and shop, Woodchurch Road, Prenton; conversion of "Talbot House," Mather Road, into flats.

In a statement issued by the DEWSBURY Corporation it is recorded that new property to the value of £39,985 has been erected, or sanctioned for erection, by private enterprise in the borough in the past year. In 1929 forty-eight houses were built by private enterprise, the cost being nearly £25,000. There was an increase in the number of shops and business premises built last year, the number being sixteen and the value £5,850. Over seventy other buildings cost a total of £8,885. Since the Housing Act of 1923 subsidies for 362 houses have been granted by the Dewsbury Corporation, and the local authority's own housing enterprise has resulted in 788 houses, some of which have been completed in the past year. It is expected that the new Dewsbury and District General Infirmary will be completed during 1930, and another public building in prospect is the new Wheelwright Girls' Grammar School, already provisionally sanctioned.

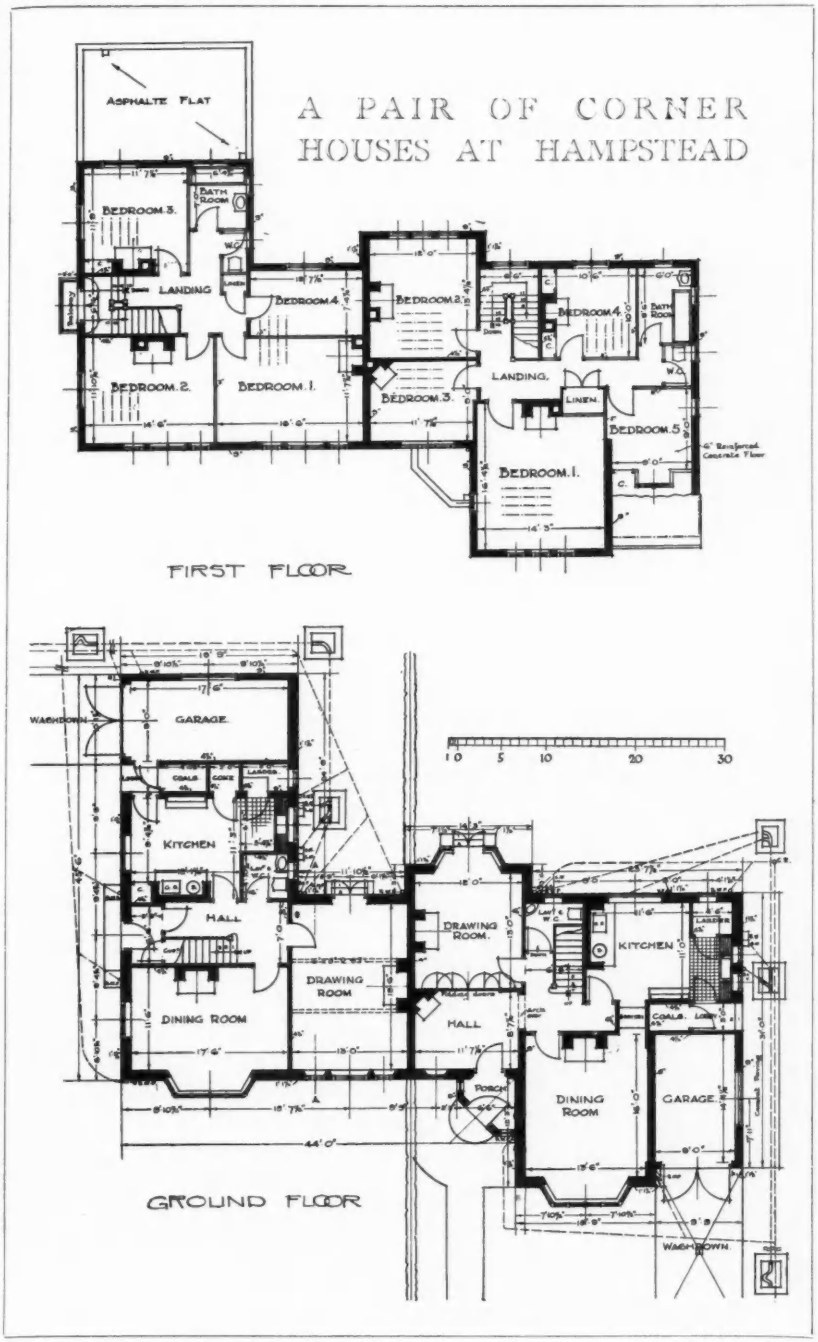
The Transport Committee is urging the York Corporation to proceed with the erection of a bus garage at FULFORD, at a total cost of £19,000, of which £9,000 will be for buildings.

Plans passed by the OLDHAM Corporation: Alterations, "Auld Lang Syne" Inn, Manchester Road, for Wilsons Brewery Co.; plumber's workshop, rear of 27 Ashton Road, for Mr. W. E. Garside; garages and repair shop, Ripponden Road, for Mr. A. Gill; alterations, "Help the Poor Struggler" Inn, Manchester Road, for Messrs. Groves and Whitnall, Ltd.; alterations, "Pullet" Inn, Sholver Lane, for Oldham Brewery Co.; alterations to various blocks, Union Workhouse, for Oldham Board of Guardians; yarn cellar and card shed, Westhulme Street, for Werneth Spinning Co., Ltd.; six houses (amended plan), Elgin Road, for Messrs. J. Whitehouse and Sons.

At a meeting of the ROTHERHAM Corporation Highways Committee, the town clerk and borough engineer submitted a report with regard to the reconstruction of the bridges in Bridge Street. A scheme was approved provided that the cost to the Corporation does not exceed £10,000.

The SALFORD Corporation has purchased four acres of land at Lower Broughton for a re-housing scheme.

Plans passed by the SHEFFIELD Corporation: Two houses, Bents Road, for Mr. J. A. Wragg; four houses, Whirlowdale Crescent, for Mr. Wm. Croft; four houses, Elmham and Waverley Roads, for Messrs. W. and E. Sadler, Ltd.; two houses, Watt Lane, for Mr. T. J. Sanderson; ten houses, Carter Knowle Road, for Mr. A. J. Belton; two houses, Greystones Avenue, for Messrs. Wm. Malthouse, Ltd.; 145 houses, Longley Estate, for the Corporation; four houses and shops, Richmond Road, for Messrs. W. and E. Sadler, Ltd.; six houses, Endowood Road, for Mr. T. H. Bailey; two houses, Whirlow Grove, for Messrs. Dyson & Co.; four houses and sixteen garages, Dixon, Dorothy and Lennox Roads, for Mr. M. Simpson, junior; two houses, Whirlow Court Road, for Mr. C. G. Robinson; twenty houses, Ridgeway Road, for the Corporation; house, workshops, etc., Matthew Street, for the Watch Committee of the Corporation.



Two Houses, Hampstead Garden Suburb. [*By C. G. Butler.*

Ground and first-floor plans. The site is at the corner of Middleway and Thornton Way. In each house on the ground floor are dining- and drawing-rooms, kitchen and garage. On the first floor one house provides four bedrooms; the other, five.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead ..	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate ..	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_1	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. 6 in., *per ft.*	0	1	3
DO. 9 in., *per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 in., *per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	8	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1
14 in. × 8 in.	4 10 0	4 15

Green randoms	£6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add per square	18s.	0d.	
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0
See "Sundries" for Asbestos Tiling.			

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ⅛ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz. per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Paint driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. *The measured work price is on the same basis . . . per ft. sup.*	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3*d.* to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ½ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 8	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—



ENTRANCE HALL:
NATIONAL DEPOSIT FRIENDLY SOCIETY'S HEADQUARTERS,
QUEEN SQUARE, BLOOMSBURY, W.C.

By

W. H. ANSELL

THIS is the marble-lined Entrance Hall on the Great Ormond Street side of the National Deposit Friendly Society's Head Offices, Queen Square, W.C.

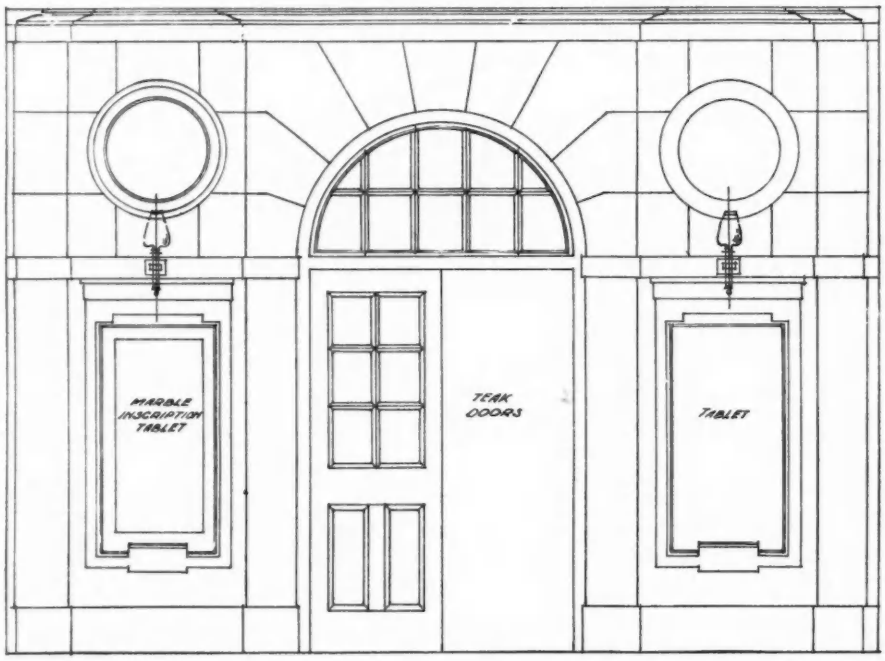
As the area available was limited, the marble work was kept broad yet delicate in detail, mouldings of any kind being omitted. The materials used were Roman marble cube mosaic for the floor, with Swedish green margins. The wall skirtings and outer surrounds of the panels are in Tinos marble, the pilasters, inner surrounds, and cappings are in Swedish green G 3 marble. The wall-lining above the capping is of Piastraccia, with roundels of Escalette, having Swedish green surrounds. The colour scheme is light and cool, with the greens predominating, a little warmer colour being provided by the Escalette.

The electric light fittings are of bronze, and all the woodwork is of teak. Since the photograph was taken, the panels have been filled with tablets bearing commemorative lettering. The woodwork was carried out by the general contractors for the building. The architect's drawings of the plan and an elevation are reproduced on the next page.

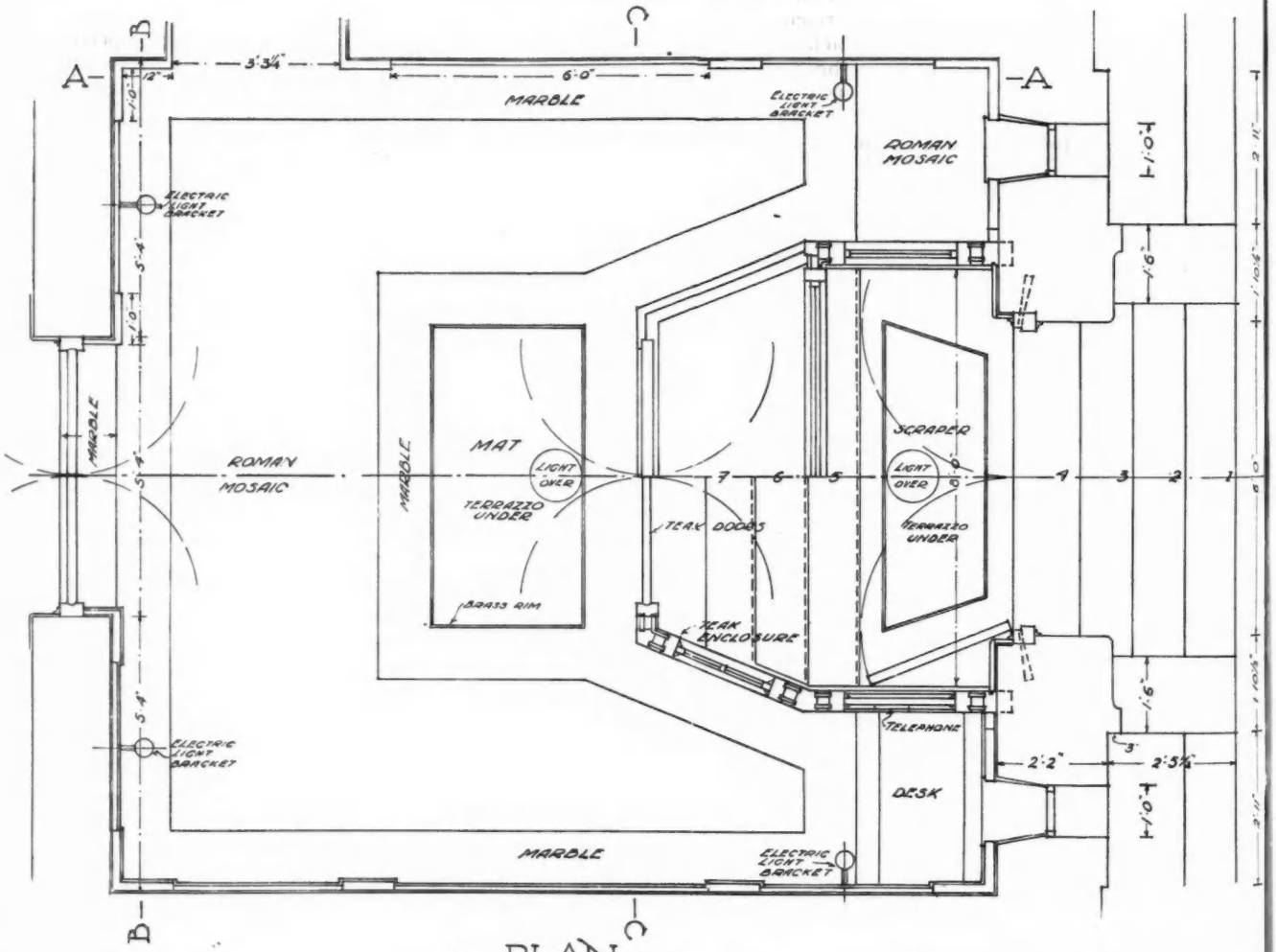
National Deposit Friendly Society's Headquarters, Bloomsbury

Plan and Elevation of Entrance Hall

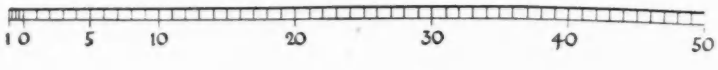
By W. H. Ansell



— ELEVATION B-B —

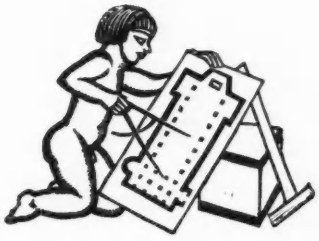


— PLAN —



For photograph] *[see previous page*

THE ARCHITECTS' JOURNAL



WEDNESDAY, JANUARY 22, 1930

ABBEY SACRISTY RECOMMENDATIONS

The Committee favour a Suggestion Advanced in these Pages

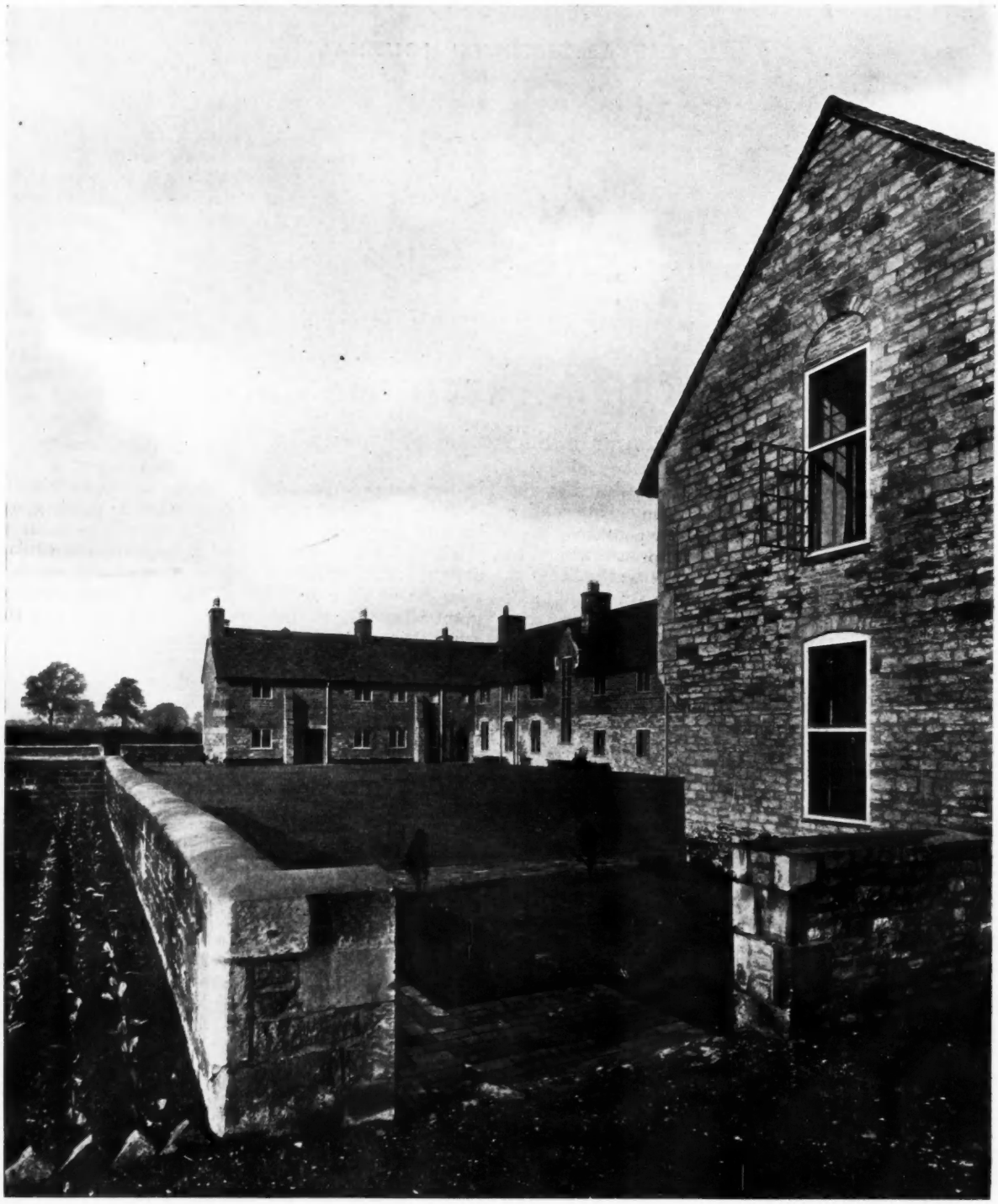
THE Report of the Committee appointed by the Dean of Westminster to consider alternative proposals for the Abbey Sacristy has now been published, and must give very great satisfaction to everybody who was concerned to preserve the beauties of Westminster Abbey. The problem was admittedly a difficult one, and no blame attaches to the Dean and Chapter because they did not in the first instance arrive at a perfect solution of it.

The first proposal to build the Sacristy on the site between St. Margaret's Church and the Abbey had the merit of simplicity, and it apparently satisfied the practical conditions admirably. But there were serious objections to it on æsthetic grounds, and it may be well to recapitulate these, for, as the Dean of Westminster is careful to state, the Committee appointed by him was merely an advisory one, and the ultimate decision rests with him and his Chapter, who are still at liberty to return to their first proposal, should they think fit to do so. It is not anticipated, however, that they will neglect the advice of a body which includes in its number not only men possessing the authority of the Presidents of the Academy and the Royal Institute of British Architects, who may be trusted to give full value to the æsthetic aspect of the problem, but the venerable Archbishop Davidson, whose ripe experience enables him to speak with authority upon all matters concerning the etiquette and requirements of Church ceremonial.

A new Sacristy was obviously needed in order that the precious vestments and other ecclesiastical objects of value could be adequately stored, and it was also desirable that space should be found for the various dignitaries to assemble before taking part in important religious functions. It was argued, plausibly enough, that every great church must grow, and the history of our cathedrals provides ample evidence of this process, whereby new generations of worshippers have left their mark upon its fabric and have added to it in a manner which has enhanced rather than impaired its architectural beauty. Why, therefore, should this process have not been allowed to proceed still farther in the case of Westminster Abbey and result in the erection of a new Sacristy jutting out from the main body of the Church ?

The answer is that, while a building may be so designed that without sacrificing its organic unity it may be possible to erect a wing at some specified point where there already exists a projection or some other element in the plan which could be regarded as an æsthetic junction between the original building and the addition to it, there is a strict limit to such a process; and in Westminster Abbey this limit had already been reached. King Henry VII's Chapel and the Western Towers, which have been cited as justification of the policy of modifying the form of a church, are in a quite different category from that of the Sacristy as originally designed by Mr. Tapper. For, unlike the latter, they shared the same axis as the main body of the church, and were an extension and additional emphasis of an existing symmetry. But little bits of buildings jutting out here and there from the historic façades of the Abbey deserve to be described as architectural carbuncles, and the prolonged agitation, which, it is now hoped, has led to the complete abandonment of the original proposal for a Sacristy on the north side of the Abbey, will have served its purpose if it for ever rules out the possibility of their appearance in the future.

The solution now recommended by the Committee closely resembles one that was first put forward in this JOURNAL. It will be remembered that of the two alternative sketch plans for a new Sacristy submitted by Mr. Trystan Edwards, and published in our issue of December 4, the second was a scheme for the utilization of the area, now described, in the Report, as "the Poets' Corner site." The Committee has, however, supplemented this proposal by the suggestion that a new Sacristy erected here should communicate by staircase and underground passage with the crypt of the Chapter House, which would provide all the additional accommodation required. A solution so obviously sensible and satisfactory is surely worthy of immediate acceptance by the Dean and Chapter.



[*By W. G. Newton and Partners.*

THE TAMING OF A SHREW

The garden front of Constable's Boarding House, Uppingham School, after remodelling. The garden was previously occupied by a collection of old buildings (*see page 159*). *When these were demolished the footings of some of the old walls were left standing about three feet above the ground to form the garden wall.*

NEWS & TOPICS

THE UNWANTED BRIDGE

NOT one word was spoken in favour of the official scheme for Charing Cross Bridge during a discussion, lasting over two hours, at a meeting of the Architectural Club in London last Friday night. Mr. W. R. Davidge said it was unthinkable that such a scheme could be adopted; and Mr. Arthur Keen, chairman of the Thames Bridges Conference, hoped everyone would do his best to prevent it being carried out. Mr. Ewart G. Culpin, L.C.C., said he believed the parents of the scheme were getting ashamed of it, and he hoped it would be buried in a dishonoured grave. There were rumours, he said, that if the abortion was opposed they would be threatened with the demolition of Waterloo Bridge. If that were true, it would be a cowardly action.

★

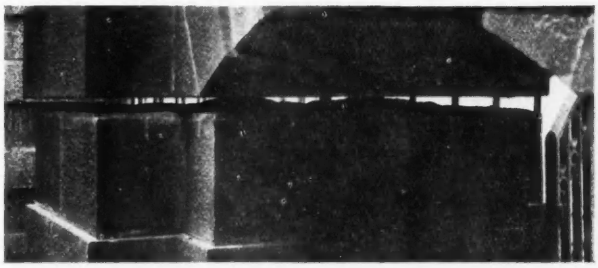
Mr. D. S. MacColl said he thought that no one who was not unhappily mixed up with the scheme was in favour of it; and Professor S. D. Adshead urged that further meetings should be organized and held to bring together the strongest possible opposition. The scheme is costly, bad architecturally, not properly town planned, and undesirable in every way. Its only likely possibilities were pointed out by Mr. J. C. Squire, who presided—namely, the creation on the Embankment of the largest grotto in the Empire, and, in Belvedere Road, of a new "Clovelly."

AN UNPREMEDITATED CANTILEVER

Mr. Mackenzie Trench, in sending me the views of the gateway at New Scotland Yard, reproduced on this page, writes: "The pier in question is the south detached pier of the west entrance to the private roadway, leading from Whitehall and Derby Street. It has been slowly settling during the last three years, but has shown the most marked signs during the past eighteen months or so. The photographs do not show quite distinctly that the pier has settled entirely clear of the granite above, but such is the case. I have had a wire passed through, and there is no point of contact anywhere between the upper and lower portions. Some small measure of support is afforded, however, by the substantial iron road gate. The weight of the granite forming the cantilever above the open joint is in the neighbourhood of twenty-nine tons. It is particularly interesting to note that this entrance gateway was built later than the police-station building adjoining, and the granite now forming the cantilever was built in at a later date. The building-in must have been very satisfactorily executed."



One of the gate-piers at New Scotland Yard, in which a gradual subsidence has left the arch, weighing some 29 tons, suspended cantilever-wise.



A near view of the New Scotland Yard subsidence, showing that there is no point of contact between the pier and the masonry arch it originally supported.

MORE WORK FOR ARCHITECTS

The raising of the school age from fourteen to fifteen, and the transference of the control of poor law institutions from boards of guardians to county councils will both entail a great deal of new building; the first to accommodate the new class of scholars, and the second to replace many of the old-fashioned, unhealthy and badly-ventilated institutions. The President of the R.I.B.A. has written, very opportunely, to the President of the Board of Education and to the Minister of Health, urging the necessity of properly-qualified architects being employed in the carrying out of this big programme.

AMERICA'S ITCH FOR ANTIQUES

I am inclined towards sympathy for the itch to possess beautiful things which sends Americans over to Europe on the spy-out. I have a mental picture of hungry souls in mid-western towns crying out for all the genuine ripe old products of antiquity; and I feel that their souls should be satisfied, and their empty museums and galleries filled. Granted this, there must be drawn some line beyond which sympathy may rightly give place to annoyance, as when some landmark, filled with all the rich associations of place and time, is filched away before one's eyes to furnish some new inglorious American niche.

ALAS, FOR GOG AND MAGOG!

Exactly such a case is the recent disappearance from Cheapside of Gog and Magog, the mechanical figures that struck the hours under their deep niche above the clock-shop of Sir John Bennett. If one felt that their transference opened up glorious vistas of new usefulness one might concede so much towards the advancement of culture in the west. But I can't believe it, and our loss, more easily

estimated, is very real. It is indeed time that we stopped this sale of national heirlooms. It is bad for our morale.

ARE WE BECOMING AMERICANIZED ?—

Mr. Shaw Desmond, writing to *The Daily Telegraph*, recently voiced somewhat the same plaint, but in a manner rather less sympathetic towards America, and it must be said, with the support of much inaccurate argument. Looking upon advertisements up and down the countryside, and upon a number of other things which he in common with others would wish away, he finds in these things signs of a steady Americanization of England. This is unfair, because England invented the first open-air poster, "Use Pears' Soap," and Wales invented the jerry-built house, neither of which is exportable, alas !

—AND DRIFTING INTO COLLECTIVISM?

Further, Mr. Desmond finds with dismay that we are drifting into a state of "collectivism." He need not despair on this account, for the poster and the jerry-built house, both of which disfigure England and America alike, are the result of individualism, and the "collectivism" towards which we definitely *steer*, and not drift, is one of the sure cures for those horrid types of selfish exploitation of "collective" resources. Public opinion, which has at



What material is this? Astragal feels inclined to offer a prize, not exceeding sixpence, for the first correct description he receives of this untouched photograph. The solution will be published next week.

last been whipped into action through the furious energies of architects, and every other type of public-minded citizen, is becoming the instrument wherewith these present scourges will be laid low, but that same public is led, and coaxed, and driven to see the truth of things. It certainly does not lead.

CONSERVING THE THAMES

Work is to be started on the new Thames and Wey drainage schemes early in the season. Though primarily intended to drain an area of low-lying land adjoining the River Wey, the probable increased outfall of these waters into the Thames has brought to maturity even more costly schemes for widening and deepening the channel of the parent river. At some points these operations are likely to alter its character. In particular the new channel which will short-circuit its winding course between Shepperton and Walton may quite easily rob the fine, flat meadows of much of their charm, especially if its direct line is marked by anything more rigid than willows or poplars. If bungalows were allowed to settle there, miles of river would never survive the indignity.

★

There is danger of losing a particularly fine mass of trees at Hampton Court Bridge if river-widening at this point is not carried out with a view to preserving amenity; while at several other places it will require all the skill of the Thames conservators and the authorities alike to avoid damaging the beauty of the banks.

SYON HOUSE A SEWAGE WORKS?

The objections to the establishment of a sewage-disposal works over part of Syon Park have a strong basis of fact, if it can be proved that the proposed works are to occupy any but a fairly narrow strip adjoining the length of the Hounslow Road, well out of sight of Kew Gardens, and behind the heavy plantations of strange trees for which the park is justly famous. Syon House, standing amid its half-wild meadows, offers one of the rarest views within a wide radius of London. It is so properly the handmaiden of Kew Gardens themselves as to appear, to all who love them both, indissolubly linked in service. Let me confess at once that the thought of Syon House coupled with a sewage works disposes me to curse Middlesex county without more ado, as a blockhead incapable of dealing with anything so beautiful. Nevertheless, I am all against any kind of misinformed public railing, and until the true facts are at hand I will hold invective in leash. The Duke of Northumberland's most spirited letter of protest should stiffen the sense of public anger with which such thoughtless proposals have been greeted. What best can be done with these priceless possessions that come into the hands of the public is another matter, and one that must be given a great deal of thought ; for it must be confessed that in these things we have as yet little real aptitude, being, as it were, too museum-minded.

THE KIND OF HOUSE WOMEN LIKE

The Daily Mail recently organized a competition among its women readers, who were invited to answer a questionnaire of an architectural character. The entrants to the competition were asked to specify in detail their conceptions of an ideal house under seven separate headings : site and position; materials; accommodation of rooms; kitchen; floors, doors and windows; internal decorative treatment; and special fitments. No women architects were eligible to compete for the prizes, which range from £250 to £10. This certainly marks a stage in the democratization of architecture. There is no doubt that it will be possible to draw some useful conclusions from the answers given to the questionnaire, which will at least show some concensus of opinion as to certain elements in the design of the small house. The field is indeed well trodden, and it would be surprising if any of the answers show any originality or reveal new suggestions as to the planning of the type of house, in respect of which one would imagine that every possible combination and permutation of rooms has already been tried. But architects are sincerely anxious to become acquainted with the feminine point of view concerning every aspect of domestic plan, and will follow the result to be seen at the "Daily Mail" Ideal Home Exhibition, with very great interest.

"TO MURDER MORTAR"

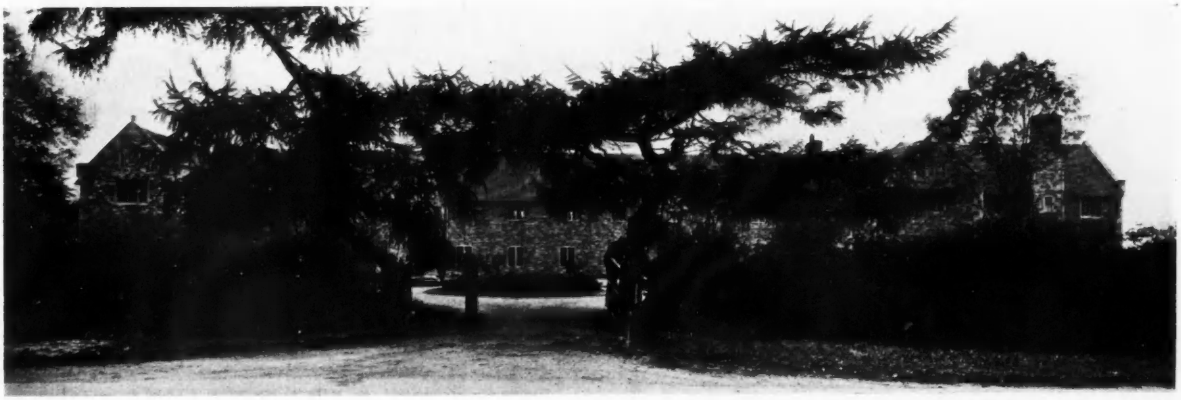
All hail to "Cheapside," who, writing to *The City Press* about lay critics of architecture, resurrects the following trenchant lines by the Rev. — Bramston :

"Sure wretched Wren was taught by bungling Jones
To murder mortar, and disfigure stones.
Who in Whitehall can symmetry discern?
I reckon Covent Garden Church a barn,
Nor hate I less the vile cathedral, Paul,
The choir's too big, the cupola's too small."

ASTRAGAL

UPPINGHAM SCHOOL REDIVIVUS

FROM DESIGNS BY W. G. NEWTON AND PARTNERS



The new main front, looking from the roadway. The skilful manner in which the building has been remodelled makes it difficult at first for the mind to establish a connection—a sequence of cause and effect—between the new and old main façades illustrated below.

THREE notable improvements have been made at Uppingham School: one: the remodelling of an old institutional building to form the new Constable's boarding-house; two: the diversion of a public footway and the demolition of some old house property to open up a new quadrangle; and three: the erection of a football pavilion.

In the first case the architects were faced with an old building, imbued and burdening the air with an atmosphere of deplorable gloom: a phantasmagoric conception, in which the roof seems lashed into unconquerable fury; like a bed of waters, seamed and scarred into a thousand conflicting channels, burst into frenzied convulsion. At the back of the institution was a riot of miserable buildings. In plan the main building took the form on both the front and back elevations of a letter E.

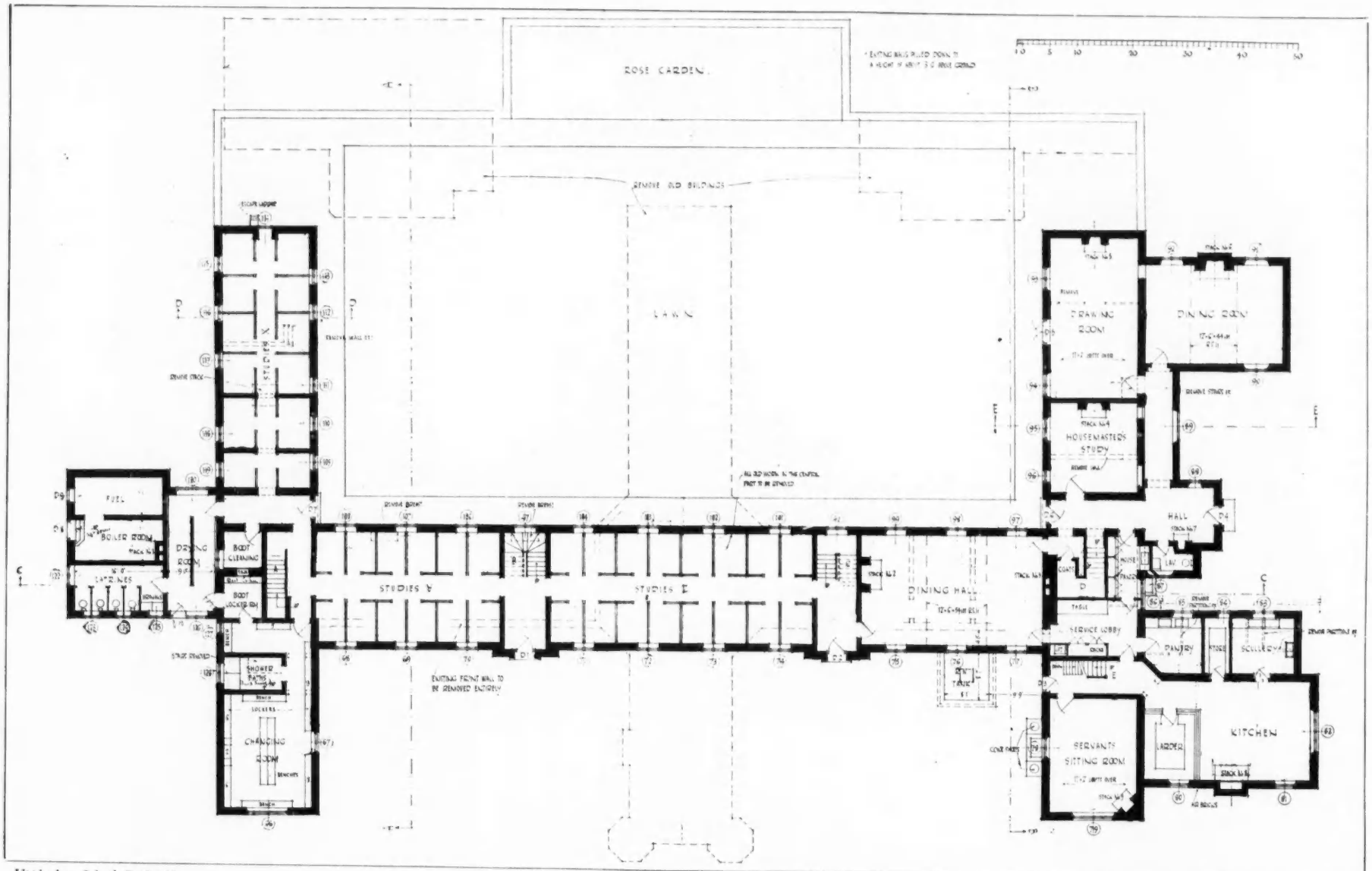


The old institution before remodelling took the form in plan of a letter E on both the main and the garden fronts. In addition to its dismal atmosphere it presented a particularly untidy sky-line.



The main front, looking from the forecourt. The centre projecting portion of the old institution was demolished, the front wall rebuilt, and a new roof added. The two doorways lead to the studies. That on the right also gives on to the dining-room, the three windows of which are seen immediately to the right of it on the ground floor.

CONSTABLE'S BOARDING HOUSE BLOCK

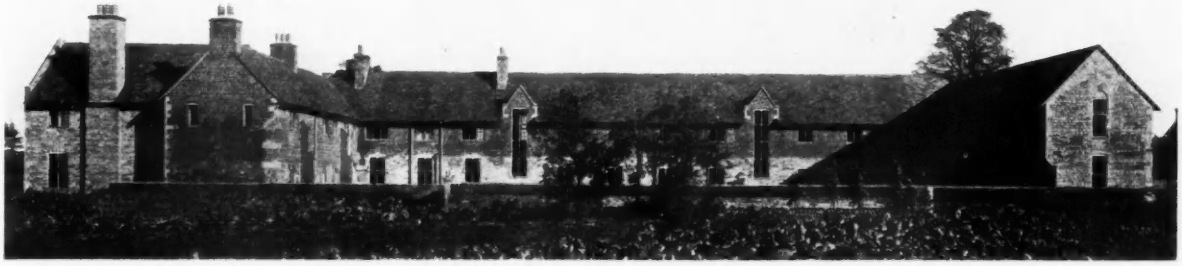


Uppingham School, Rutland.]

The architects' drawing of the ground-floor plan. It acts as a useful guide in retracing the steps by which the remodelling has been carried out. The dotted lines show the disposition of the old buildings which have been removed. The new building now comprises on the ground floor the accommodation shown.

CONSTABLE'S BOARDING HOUSE BLOCK

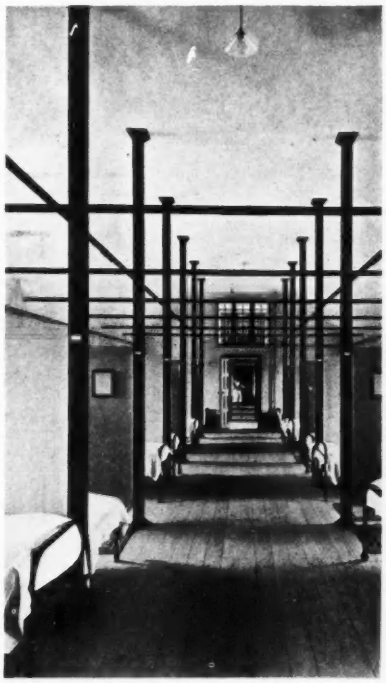
[*By W. G. Newton and Partners.*



On the remodelled garden side the layout includes a lawn and rose garden, illustrated on page 154. Previously these were covered with the curious imbroglio of old buildings shown below.

An examination of the plans and photographs show with what skill the architects have solved an extraordinary riddle. The old buildings forming the centre arm of the E have been pulled down entirely on both fronts, making the whole plan roughly H-shape, and a new front wall has been erected to the main elevation about 4 ft. in advance of the old one. Little, if any, alteration seems to have been made to the design of the end wings of the old building, but the removal of the centre projecting portions, the addition of a new roof of simple outline, and the rearrangement of the chimney-stacks has enabled the architects to produce a building of considerable dignity and charm, with wall surfaces unbroken on the main front, save for the windows and the projecting doorways, gabled at top-story height, leading respectively to the studies and dining-room.

At the back the collection of old buildings has been demolished. Some of the exterior walls, forming part of the footings of these old buildings, have been pulled down only to a height of 3 ft. above the ground to form a wall to the rose garden and lawn. This, the back elevation of the building, has been treated in a similar manner to the main front. Internally the building has been replanned to meet the special requirements of the school.



The dormitories are planned with a central corridor, on either side of which are placed the cubicles for the use of the scholars.

The second improvement, the formation of a new quadrangle, also involved the demolition of some old property. It further involved the closing of part of a highway and the diversion of a footpath.

The original footpath ran along the north side of the old school-house studies and the south and west sides of the old buildings. The demolition of this old property has allowed the pathway to be set back about 54 ft. to the north, thus providing a new quadrangle and at the same time opening up pleasant vistas. A portion of the old studies to the west was taken down to accommodate a new garden house, and seating and other desirable amenities have been provided.

The football pavilion, the third improvement, provides seating accommodation for fifty spectators and standing for 230. All the seating is planned in the centre hipped portion of the pavilion, which provides for 30 persons on the ground floor, and 20 in the gallery. On either side is a covered wing, each giving two tiers of standing accommodation for 75 spectators. At the back is the changing-room, with a bath, 11 ft. 6 ins. long, 9 ft. 6 ins. wide, and 2 ft. 3 ins. deep.



Uppingham School, Rutland.] [*By W. G. Newton and Partners.*

This photograph of the old garden side should be compared with that reproduced above. All the old buildings between the end wings were demolished, including the central projecting portion of the institution. The view shows demolition work in progress.

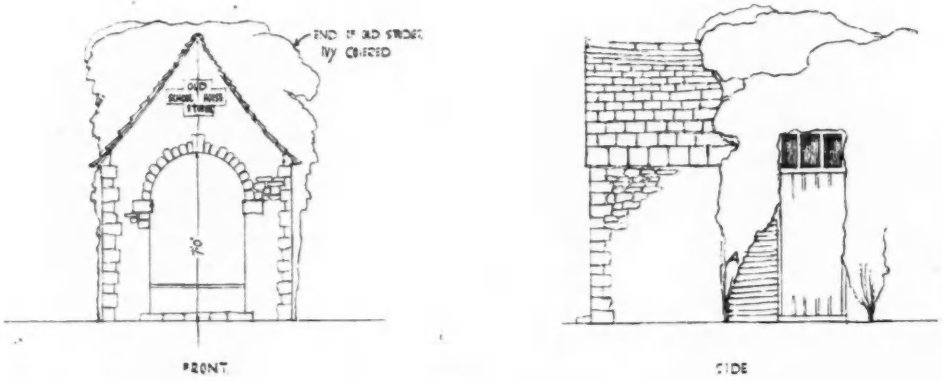
CONSTABLE'S BOARDING HOUSE BLOCK



Uppingham School, Rutland.]

The two photographs show respectively easterly and westerly views of the new quadrangle which has been formed by the demolition of some old property, the closing of part of a highway, and the diversion of a footway. They should be compared with the plans reproduced on page 162. On the right of the first illustration are

CLEARANCE OF THE GROUND—

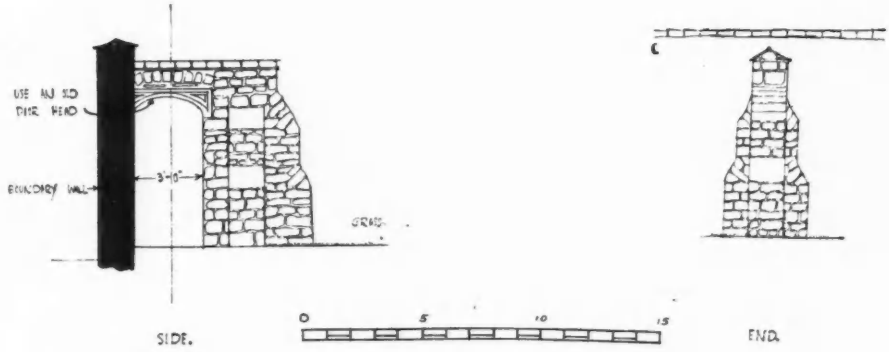




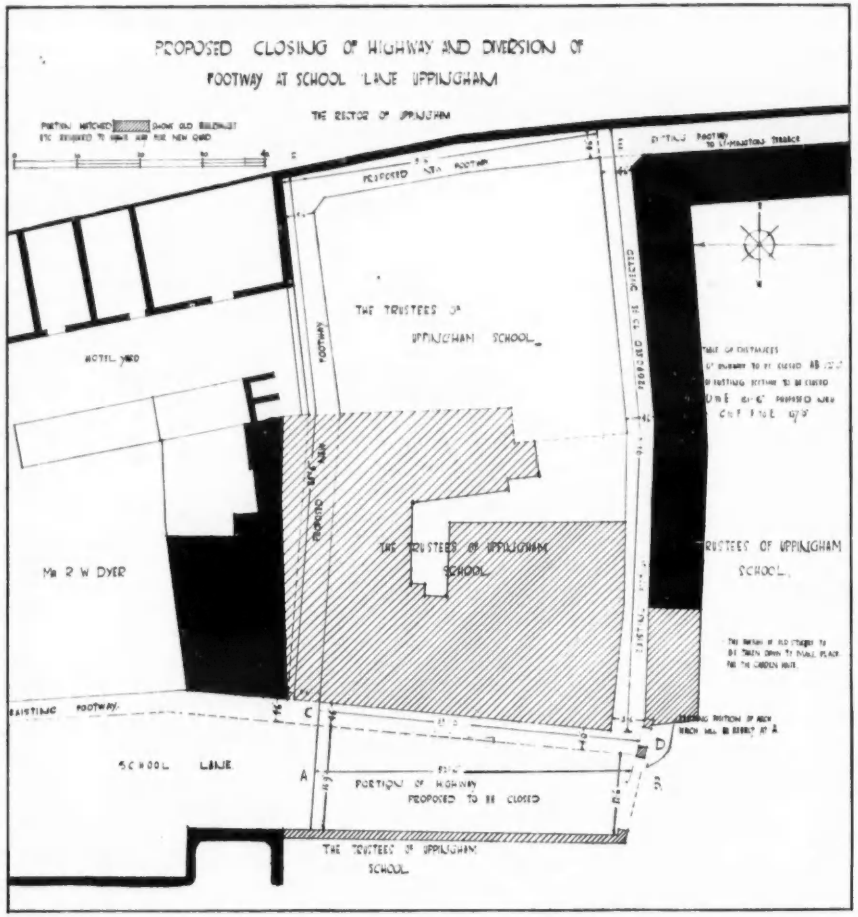
—FOR THE NEW SCHOOL QUADRANGLE

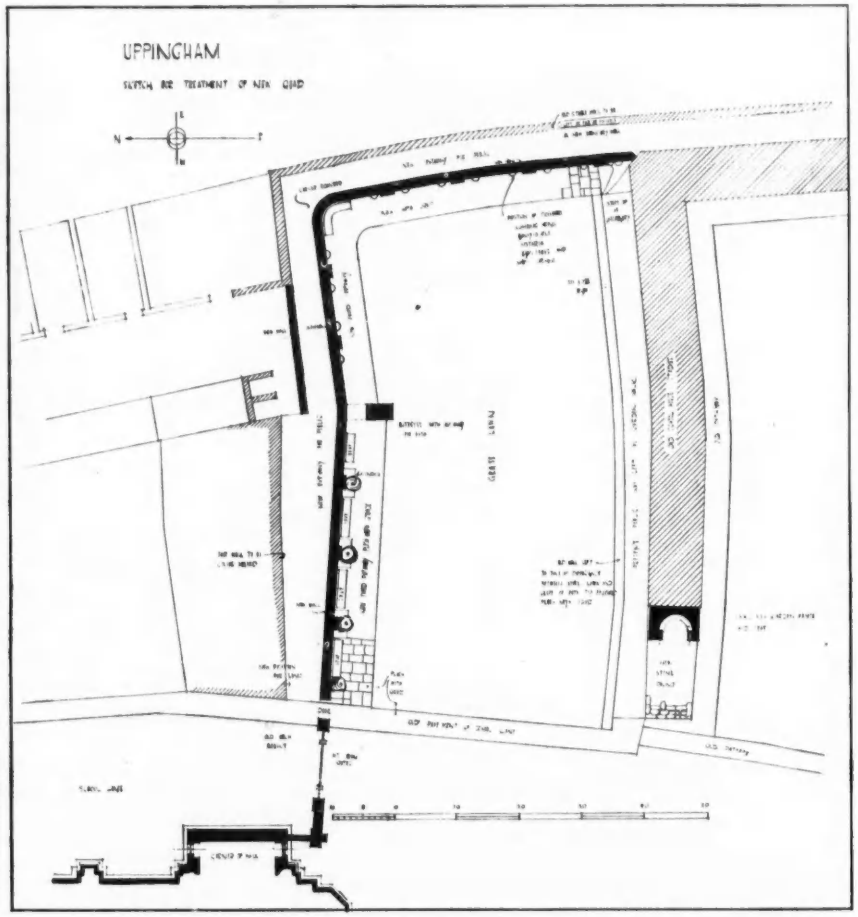
seen the old school house studies. The westerly end of these studies has been pulled down and a small garden house and seat, the architects' drawings of which are reproduced on the facing page, have been added. On this page are their drawings of the big buttress on the lawn which is to be seen on the right of the illustration reproduced above.

[By W. G. Newton and Partners.



BIG BUTTRESS ON LAWN

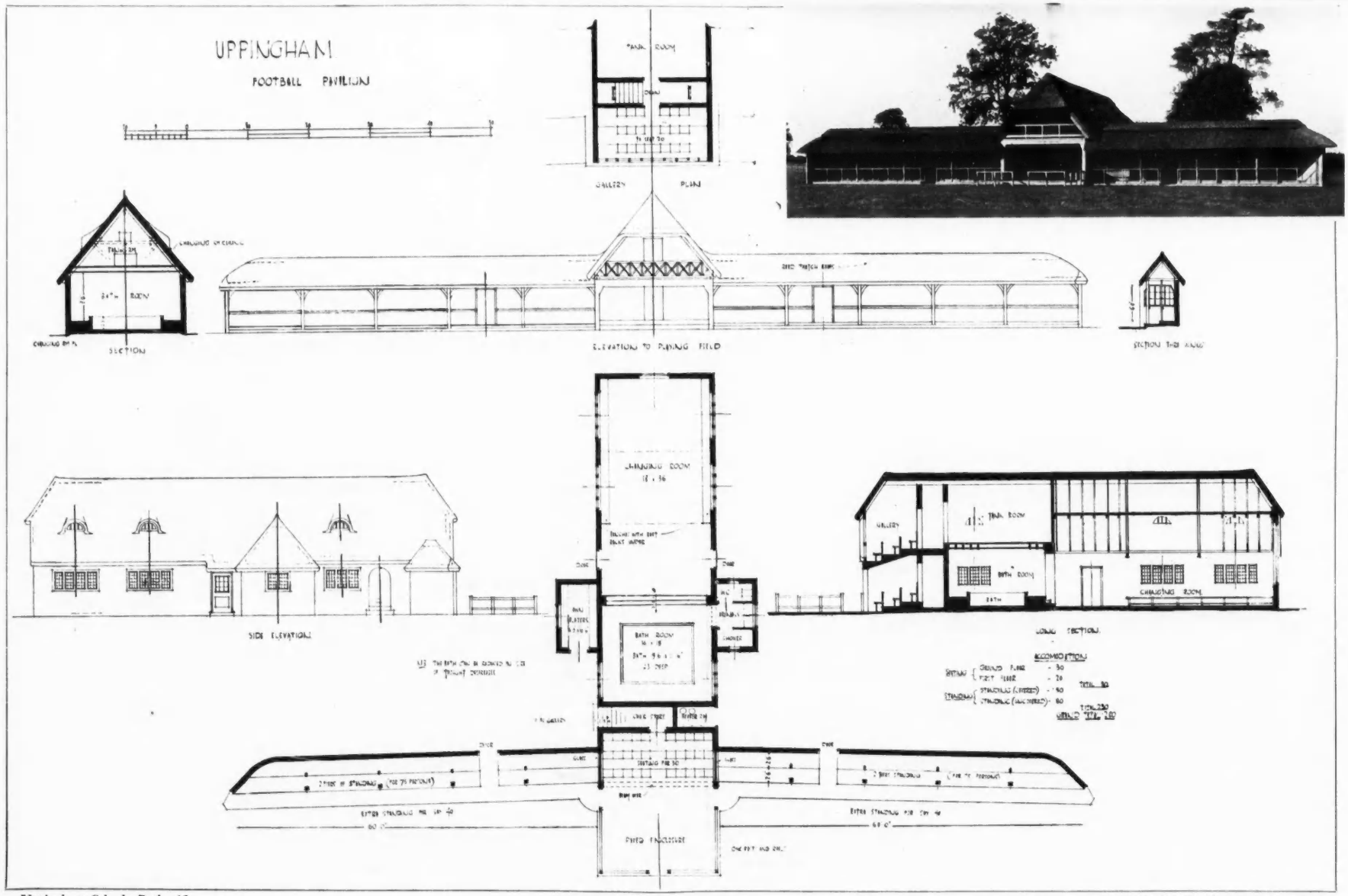




Uppingham School, Rutland.] [*By W. G. Newton and Partners.*

Plans showing the layout before and after the creation of the new quadrangle. The old property, shown hatched in the left-hand drawing, has been cleared, and the footway running to the right of it set back about 54 ft. to the north. In the right-hand drawing existing work is shown hatched and new work in black.

CLEARANCE OF THE GROUND FOR THE NEW SCHOOL QUADRANGLE



Uppingham School, Rutland.] [*By W. G. Newton and Partners.*

NEW FOOTBALL PAVILION

The architects' drawing of the plans, elevations and sections, and a photograph of the playing field front of a new football pavilion, included in the recent improvement scheme. Accommodation is given, in a thatched building, for 280 spectators, 50 sitting and 230 standing. The seating is planned in the centre hipped portion, and provides for thirty persons on the ground floor and twenty in the gallery; 150 of the standing spectators are under cover.



A view from the back. On the left is the changing and bath room and on the right a portion of the covered-in standing accommodation for spectators.

Uppingham School, Rutland.] **NEW FOOTBALL PAVILION** [*By W. G. Newton and Partners.*



The interior of the changing room, looking towards the bath, which is approached by steps. The bath is 11 ft. 6 ins. long, 9 ft. 6 ins. wide and 2 ft. 3 ins. deep. On two sides of the changing room are benches with boot racks under. Portions of these are seen in the foreground of the illustration.

THE FORTHCOMING RURAL HOUSING BILL

Provisions the Government should include

BY PHILIP HURD

AS the Government have in preparation another Housing Bill for rural areas it is opportune to examine the state of rural housing, to estimate the help given by past enactments, and analyse present problems.

Two conditions must be noticed as governing any schemes that are to be of practical value in rural areas. The first factor is the wage of the agricultural worker, which averages out at about 32s. a week, and clearly necessitates that the rental of the cottage should be low, i.e. not more than 3s. 6d. or 4s. a week. The second factor is that the nature of the rural worker's occupation necessitates his living near his work, and it follows from this that each farm has, really, its own little residential group. Clearly the effect of both these conditions is to differentiate rural from urban housing problems; for while in a town we can reasonably expect a wage-earner to pay 10s. or so a week for his house, and moreover to live in a residential district away from his factory or office, in the country the wage-earner cannot pay more than 4s. weekly for a cottage, which must of necessity be near his work.

Four schemes have been devised by post-war Governments to deal with this shortage of houses in rural areas. Under the Addison scheme (1919) the rent of Council houses was usually 7s. 6d. per week plus rates, and such a rent was clearly beyond the means of the ordinary farm-worker. The Chamberlain scheme (1923) chiefly benefited the owner-occupier class, and the contribution made by this Act to the housing of the agricultural worker was practically nil. Under the Wheatley scheme (1924) the rates of the Exchequer subsidy now are :

1 : In the case of houses erected in non-agricultural parishes, £7 10s. per house annually for forty years.

2 : In the case of houses in agricultural parishes, £11 per house annually for forty years.

The subsidy for the local rates is in both cases £3 15s. per house annually for forty years.

Under this Act 14,487 houses have been erected in agricultural parishes up to September 30, 1929, and the rents of these houses have varied from 5s. to 8s. a week plus rates. The second Chamberlain scheme — the Housing (Rural Workers) Act of 1926— does not attempt to provide for new houses, but provides grants and loans to owners who will carry out re-conditioning or reconstruction work costing not more than £150. Up to September 30 last, assistance had been promised under the Act in respect of 2,200 dwellings. This Act is only available for applications received by local authorities before October 1, 1931.

Although both the decline in arable cultivation and the greater use of labour-saving machinery have lessened the shortage of housing in some rural areas, notably in East Anglia, we find that where the 1924 and 1926 Acts have been sluggishly administered there is still a considerable shortage, which necessitates both overcrowding, and the housing of farm-workers at some distance from their work. Perhaps more than any other the 1926 Act has suffered from political misrepresentation and local apathy; yet where the local authorities have put their hands to the task, enlisting the help of those closest to the problem, it has worked excellently.

In Devonshire, where this Act has been used by the County Council in close co-operation with the Rural District Councils, 500 of these old cottages, many of architectural merit, are being re-conditioned at a county rate cost of one-sixth of 1d. in the pound for twenty years. In Shropshire the Clerk to the Atcham R.D.C. testifies that the Act has enabled him to maintain " those glorious black-and-white thatched cottages and make them infinitely better than any we could build under the Housing Acts." He should know what he is talking about, yet opponents say of the Act that none of the expected results has materialized.

It is true that in some counties a curious prejudice has prevented the Act from having effect, but where this prejudice has been overcome, as in Devonshire, the results have been more than satisfactory. Before leaving the subject of this 1926 Act, it might be instructive to note that when re-conditioned or reconstructed these cottages generally have :

1 : A properly lighted and well-ventilated food storage.

2 : A wash-house and furnace pan.

3 : Adequately ventilated bedrooms (not insisted upon where two large bedrooms are available).

4 : A suitable water supply—wells rendered safe from surface pollution and fitted with a pump (except in special circumstances and subject to stringent conditions, rainwater is not accepted as suitable for drinking or culinary purposes, nor, except as a supplementary supply, is it accepted for flushing purposes unless storage capacity is ample).

5 : A separately lighted and ventilated w.c. or earth closet.

6 : Wash-up sink, not in living-room.

7 : Slating laid to a four-inch lap (asbestos slating, if used, to be blue, to harmonize with surrounding country. This applies to Devonshire in particular).

8 : All bare cob walls protected by plastering finished rough-cast or stucco.

9 : Concrete or other approved paving round all external doors.

10 : All necessary repairs carried out.

Mr. Greenwood could, of course, add a compulsory clause to existing Acts, but practical objections rule this out. One thing is fairly certain—he will tackle the tied-cottage problem. The Government regard the tied-cottage as one of the most serious evils of village life, for by this system any labourer working on a farm may, on dismissal by his employer, be evicted from his cottage in order to make room for the succeeding farm labourer.

Put baldly thus, the system sounds harsh, but when we realize how important it is for the farm labourer to live near his work and place this importance beside the small number of cases that have not been settled by the exercise of good will, the system appears in a different light, and we cannot feel certain that interference will not endanger the integrity of the ideal scheme. But what evil there is in the tied-cottage system mainly arises through shortage of houses, and there appear to be three possible means of mitigating this shortage, which Mr. Greenwood may or may not embody in his new Housing Act. First, the public authorities might be compelled to house their own employees so that school teachers, postmen, the police, roadmen and others would be removed from the present competition for houses; secondly, the subsidy might be increased for rural houses; and thirdly, the £11 grant under the Wheatley Act (1924) might be made available for houses erected in any part of a rural district, provided that such houses were exclusively reserved for occupation by a carefully defined class of agricultural and other rural workers.

Two points, however, Mr. Greenwood must not miss : he will not be easily forgiven if he forgets for one moment to " preserve rural England," nor will his Act, however carefully prepared, be of any practical value unless he can devise means of diplomatically forcing sluggish county and rural district councils to co-operate efficiently.

THE NEW CHARING CROSS BRIDGE

Its Effect upon Unemployment Considered

IT is not intended to criticize here the planning and design of any scheme for the new Charing Cross Bridge. Dealing chiefly with the L.C.C. scheme the aim of this article is to discuss the probable effect it will have upon unemployment in the London district.

Statistics show us that, roughly, a little under five per cent. of the total of skilled and a little over ten per cent. of the total of unskilled workers in the building trade were on the unemployment lists in London during October. The figures for November are seven per cent. and eleven per cent. respectively, a seasonal and not abnormal increase. Five per cent. is looked upon as the normal figure of unemployment, the word normal in this case meaning that five per cent. might be expected in view of the nature of the employment involving frequent breaks between leaving one job on its completion and the finding of another, bad weather, holidays and sickness. It might be expected that the ratio of unemployment among the unskilled would be the same as that among the skilled, whereas it is more than twice as great.

There are various reasons for this discrepancy, the principal being that the wages are higher than in other trades. At present wages are 1s. 4½d. per hour. Besides, no occupation can be healthier, conditions of employment are favourable to the men, and then there is the lure of the supposed delights of London life. These advantages attract men from far and near, so that the unskilled labour market is always overstocked. Moreover, many self-styled building labourers are nothing of the sort, as many a foreman knows to his annoyance.

There has been of late great activity in the London building trade. There are signs that this activity is slackening. That means a swelling of the number of unemployed, for the men who are attracted to London do not return to the place from whence they came when work slackens; they stay, hoping for better times. Should there be any considerable falling-off of trade, the Charing Cross scheme would be unable for some time to give any compensating relief worth mentioning.

The work in connection with the L.C.C. scheme consists of:

a: Demolition of existing buildings.
b: Formation of new roads and diversion of old
c: The new railway station.
d: Temporary bridge and approaches.
e: Demolition and rebuilding of the bridge.
f: New workmen's dwellings.

It also involves new buildings to replace those expropriated. These are not included in the scheme.

The buildings to be pulled down cannot be handed over to the housebreakers and people cannot be expelled from their houses, their shops, offices, warehouses and workshops all at once.

No one can walk through the condemned area without feeling that the execution of the scheme must be accompanied by much inconvenience, hardship and distress; poor folk must be turned out of their homes, many a small business whose owner has worked for years to establish a connection must be destroyed and the tradesmen forced to start afresh; workers will lose their places and join the ranks of the unemployed. Some mitigation of these hardships can be had by advancing slowly step by step. The promoters of the Bill know that progress cannot be rapid, for they put October 31, 1935, for the cessation of powers of compulsory purchase, and October 31, 1940, for the completion of the work outlined in the Bill. Even so, the greatest care must be taken to prevent injustice in dealing with the expropriated, who should not suffer that others might benefit.

Not until the rehousing question is settled can work on the new station begin, and not until the new station is built and the railroad work in connection finished can the new bridge be started. As far as can be gathered from the map, about 1½ miles of new streets will have to be formed on the Surrey side only (including the tunnelled portions), and about two miles of new frontage built.

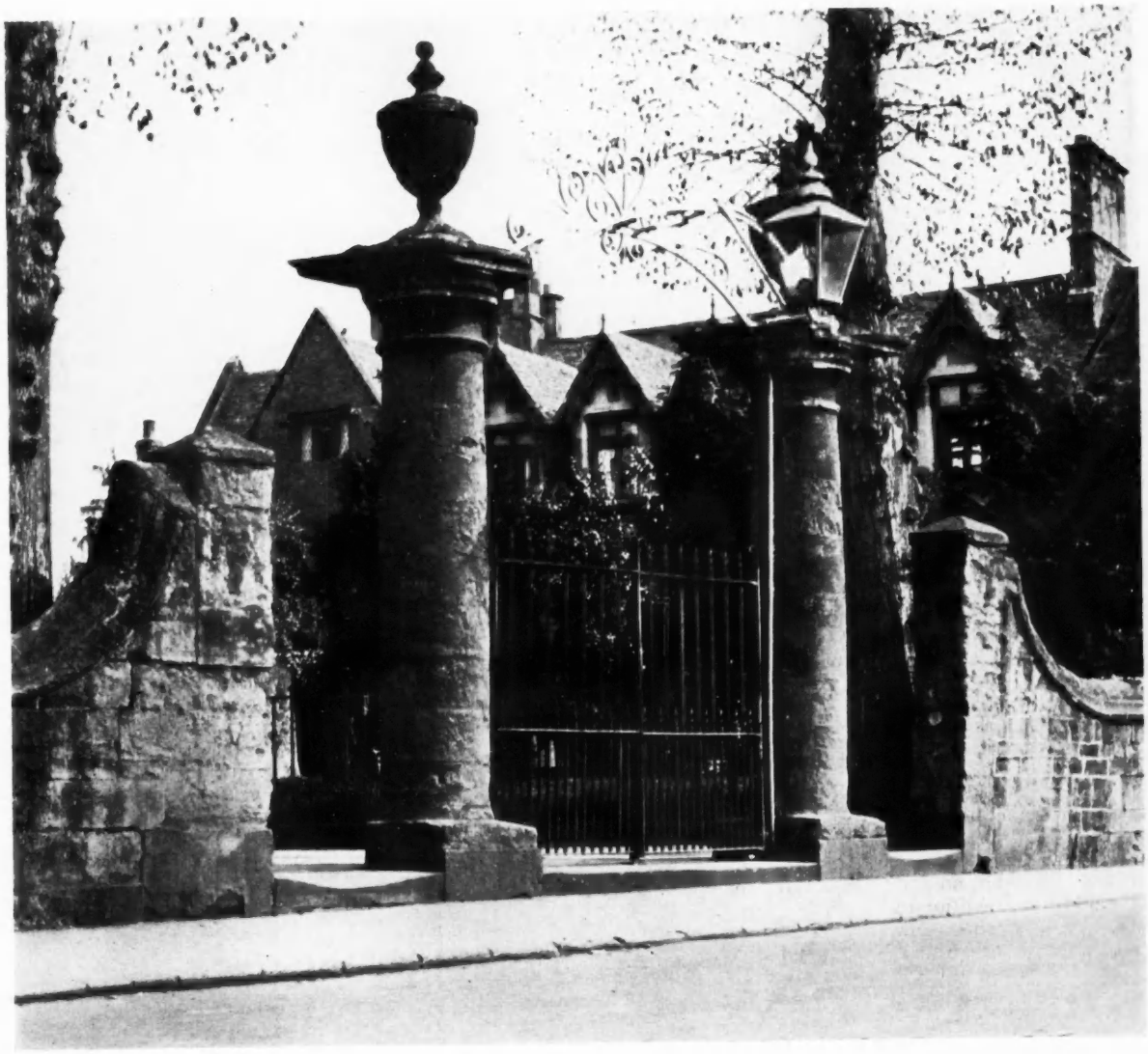
The cost of the scheme as estimated by the engineers is £14,660,000, including expropriation, compensation and all expenses, so that we may put the actual builders' work at, say, £10,000,000, to which may be added £7,000,000 for the cost of rebuilding along the new frontages and elsewhere, making a total of £17,000,000 to be spent in ten years, or an average of £1,700,000 a year. The labour required for this would be about £700,000, which last is the figure that interests us, as it deals with London labour only, that involved in providing materials being employed elsewhere. This £700,000 may be divided into £450,000 for skilled and £250,000 for unskilled labour, giving employment for 2,300 artisans and 1,600 labourers as an average. At first the total employed would be below the average, the proportion of unskilled being larger than that of the skilled. Then, as building proceeded, the number of workmen would exceed the average, the proportion of skilled men rising until towards the end the total number would drop and the proportion of skilled men would continue to rise.

Every new job necessarily must reduce unemployment in the particular trades interested, but the effect in the London district is complex for reasons already given, so the percentage of unemployed remains nearly stationary. And this is no ordinary job; it will cause disturbance far greater than usual, and consequently unemployment in trades other than building, to such an extent that it is doubtful whether in the immediate future it may not increase rather than diminish unemployment as a whole.

The many schemes which have been devised for dealing with the bridge problem may be divided into two categories (with variations in each), viz.: those that provide for the removal, and rebuilding on the south side, of Charing Cross station, and those that retain the station in its present position and rebuild the bridge. Schemes under the latter category would cause less disturbance and consequent unemployment than those under the former. Whether they would be better in the long run is another matter. Of the ultimate benefit to London of a well-considered scheme there can be no doubt, but the full benefit will be reaped by the growing and future generations. Our immediate problem is so to carry out the scheme that it will inflict the least possible hardship upon the present generation. The factors in the problem are:

a: The additional employment caused by the work.
b: The unemployment caused by the disturbance.
c: The additional labour attracted to London;

and the problem is, will (a) be greater or less than (b) + (c)? Whatever the answer may be, and whatever the scheme may be, it is obvious that it will not go very far towards settling the unemployment trouble in London.



ENGLISH PRECEDENT No. 99

GATE PIERS, BANBURY CHURCH, OXFORDSHIRE

These massive Doric columns, surmounted by beautifully shaped urns, form a unique entry to the churchyard. They are of local Hornton ironstone.

The apparent extravagant overhang of the abacus is due to the whole thing being worked on the skew—a rare precedent. The gas engineer's later contribution to the composition is the reverse of illuminating.

—[C. M. G. ARMSTRONG.]

JAGO *v.* SWILLERTON AND TOOMER

In the matter of the Arbitration Act, 1889

BY KARSHISH

This is an action before an arbitrator, brought by Colonel Jago, J.P., jointly and severally against builder and architect, for damages for the collapse of a village hall. Mr. Chawlegger, K.C., and a Junior represent the plaintiff; Mr. Twistle, the defendant Swillerton, and Mr. Pitfall, K.C.—with him Mr. Wrackem—the defendant Toomer. The first day's hearing concluded the case for the plaintiff. Mr. Pitfall, who was briefed only at the last moment, has arranged a conference with his client, Toomer, before the second day's hearing, when Pitfall has, with Twistle, to open the defendants' case.

iii: The Defendants Open

TOOMER had been waiting nearly half an hour when Mr. Pitfall—with him Mr. Wrackem—and a clerk, carrying a bag of papers, appeared. Mr. Pitfall was engaged for some time instructing his clerk, but when he gave his attention to *Jago and Toomer* it was at once clear that, by some amazing process of analysis and absorption, he had got to the bottom of the whole business and made himself master of all the ramifications of the case; so that the questions he asked Toomer referred to just those details which Toomer had always felt to lie at the root of the matters in dispute, although he had never been able to hold Bosson to them. Pitfall's nervous tension and acute concentration was almost terrible; yet his self-control seemed perfect and his methodical orderliness of mind, unswayed. The patience with which he probed the lumbering processes of Toomer's fat brains was remarkable. He seemed, in a tired way, cheerful; and he and Wrackem together pursued an obscure joke as they burrowed among the papers.

"We'll put it across old Chaw this time," Pitfall said: but he showed no concern whatever for Toomer's plight, nor the least sympathy for his heavy dejection.

The parties took their seats at the table punctually, and the lawyers exhibited the same cheerful relish as on the previous day. The arbitrator then called on Mr. Pitfall to open the defence. As Pitfall was senior to Twistle, being a K.C., while Twistle was a Junior, it had been arranged between them that Pitfall should present the issue joined by Swillerton and Toomer in common, namely, that neither of them was liable. He had also, as we know, to urge, on behalf of Toomer, that the failure of the building was due to Swillerton. To ordinary mortals this might seem a hopeless position for an advocate; but to barristers and judges who can argue and give verdict, concerning the married, that A has committed adultery with B, but that B has not committed adultery with A, there is no difficulty about the matter whatever.

Mr. Pitfall, whose earnest, compelling manner and alluring incisiveness of utterance was in marked contrast to the charming and almost indolent assurance of Chawlegger, opened his defence by claiming credit for the defendants for the whole of the accommodating concessions and agreements, lightening the task of the arbitrator, which Chawlegger had held out as a special merit of the plaintiff. He then went on to demolish Chawlegger's opening tribute to his client:—I think, Mr. Arbitrator, that my learned friend might have spared you his flapdoodle—yes, sir, flapdoodle—about the Squire, the benefactor of villagers, the good angel of his tenants. The facts are, that the plaintiff's fortuitous elevation to the rank of Colonel in the A.S.C. so inflated his self-importance that, shortly after the war, he turned Jago's Candle Works into a Limited Liability Company, moved well out of range of its familiar smells and, without more ado, became one of my learned friend's Old English Squires. Sir, the plaintiff is a shallow, presumptive man—as one who vaunts his temporary military rank needs must be; he is a rich man—as a successful manufacturer needs must be; he vaunts open-handedness—as a wealthy *parvenu* aspiring to social importance needs must do; he is a benefactor to the village he has bought—as a man who has no other means but his purse of winning the respect of his humble neighbours and usurping the position of country gentleman, needs must be: *but*, Mr. Arbitrator, you have seen the plaintiff; you have heard him giving evidence from that chair; you have observed his demeanour under cross-examination, and it is not necessary for me to suggest to your mind that he is an arrogant man, inflated with self-importance, whose vanity leads him to condescend to those who are cowed by his pretensions, but does not deter him from toadying those who take him at his true valuation, nor from crushing by his wealth and power those who incur his animosity by refusing to be either cowed or flattered. The defendants, Mr. Arbitrator, are in this unfortunate but honourable situation.—I must ask your protection, sir: the plaintiff has for some time been grimacing at me. I protest against these attempts by the other side to disconcert me, and put me out of countenance.

Colonel Jago: It's monstrous.

The Arbitrator: As long as you remain in the room, Colonel Jago, you must control yourself. I suggest you should not look at Counsel. I will see that he does not go too far.

Mr. Pitfall then went on to give an enthralling sketch of Toomer's history and credentials, and of the esteem in which he was held both professionally and as a man; and described how he had risen by his own unaided efforts, enforced by integrity, capacity and hard work, from a humble position on the staff of the engineer of the Municipal Council to be one of the most highly esteemed and most distinguished among the consulting architects and surveyors of Nollingborough.

It may occur to you, Mr. Arbitrator—Counsel went on—that, for a man earning his daily bread in a precarious profession in a restricted area beset by rivals, it requires no little courage to repulse opportunities for settlement offered by a rich and powerful adversary, and, rather than submit to injustice, face the notoriety, distress, loss of time, cost and risks of an action at law. Mr. Toomer is not a man, Mr. Arbitrator, whatever my learned brother may say——

Chawlegger: I have not questioned Mr. Toomer's courage——

Pitfall: ——*may* say hereafter, to flinch from what his self-respect demands, through fear of consequences. My client, sir, while yet a mere boy, distinguished himself in an act of physical courage which was acknowledged by a certificate of the Royal Humane Society and by an inscribed watch, the gift of the members of the church

choir to which he belonged, presented to him on a public occasion by the Bishop of the diocese— I notice my learned friend ostentatiously looking at his watch.

Mr. Chawlegger : I am consulting the time.

Mr. Pitfall : My friend's consultations are ill-timed. He should consult decorum.

Mr. Chawlegger : Certainly, if my learned friend will lead.

Mr. Pitfall : Counsel knows perfectly well that I am doing so. I am leading for the defendants.

Mr. Chawlegger : Then I suggest that my friend should open his case.

Mr. Pitfall : And I suggest, Mr. Arbitrator, that my learned friend should withdraw *his*—— (indicating the open watch-case which Chawlegger had thrust out on the table).

Arbitrator : Come, come, Mr. Pitfall, get on, if you please. You are wasting time.

I shall not, sir—(Mr. Pitfall continued) —detain you many minutes, for the evidence called by the learned Counsel on the other side so well presents the defendants' case that my own witnesses will have little to do but enforce the evidence that has already been given. For what are the facts? The plaintiff, a rich, powerful and domineering man, a Colonel and a Justice of the Peace, engages the services of an architect and builder of relatively humble station, but of high reputation in the locality, to build for him a village hall ; and this rich man, whose only use for his riches is to get his own way, imposes an overbearing arrogance upon his architect, and, among other martial commands, orders a certain kind of flooring of which, among others, his architect has given him a particular description. As the result of laying that flooring in the way it, and other flooring, is usually laid, the building finally collapsed. But why did the building collapse? It collapsed because the plaintiff allowed a horde of his drunken and disorderly friends callously to knock the place down. The buckling of the floor was *not* the cause of the collapse of the building. I will show that all could have been made safe merely by removing the blocks and wedges, or cutting away one board down the length of the room. The floor would then have sunk back secure and free on its proper bearings and remained level, rigid and true; and I submit, sir, with confidence, that the whole extent and amount of the damage which the plaintiff can by any arguments, however strained, hope to lay to the account of the defendants, is limited to what would have been the cost of releasing and restoring the floor in this way. The collapse of the building was due to the wilful, mischievous ill-usage of the hall by the plaintiff in promoting therein a beastly, drunken orgy. I will show that, for that purpose, he sent to the hall a free gift of whiskey.

Arbitrator (to Colonel Jago) : I have already said, Colonel Jago, that demonstrations cannot be allowed. You must behave yourself, sir.

Mr. Twistle, on behalf of his client, the defendant Swillerton, said he (Counsel) entirely associated himself with the remarks of his learned friend in his contention that the collapse of the hall was due to the mischievous and wanton act of the plaintiff after the floor had buckled; that the buckling of the floor would not have happened except for the excessive and improper strain put upon it, and that the buckling could readily and safely have been restored by his client if he had been given an opportunity of doing so. The behaviour of the floor in buckling was unprecedented and could not have been foreseen, and it would be given in evidence that his client performed his duties according to recognized practice in the building trade in leaving the wedges and blocks in position. It was his duty to abide by that recognized practice unless he was otherwise instructed by the architect; but he received no such instructions, and he (Counsel) would show that the architect must have been aware of this recognized practice; that he could have informed himself by observation or by inquiry of what was being done; that he raised no objection to the blocks and wedges being left in place, and that, by his formal approval of the work in the granting of the final certificate, he specifically signalized his approval of what had been done.

Mr. Pitfall said he would first call the Rector of Grastopen, as the reverend gentleman, who had come expressly to London to give evidence, was in attendance.

The Rev. HOLROYD AVERIL, in reply to Counsel, said that he knew the defendant, Toomer, intimately.

Counsel : Is he a man highly esteemed by all who know him ?—Oh, most.

Conscientious and capable, and thoroughly to be relied on ?—I should be very sorry to think otherwise.

Not the sort of man who would take his obligations lightly ?—Indeed, no. He was always most good to his mother when she was with us.

You were, I think, Mr. Averil, at the Village Hall on the evening of the collapse ?—That is so, yes ; but providentially, I left before it fell.

How was it you came to leave ?—I felt I could no longer be of service—I regret to say.

Do you mean the proceedings got out of hand?—Yes, I am afraid so—after the dancing began.

Was there much drinking?—Yes, unfortunately; it was most regrettable.

Did you see anyone drunk?—I cannot truthfully state that, I am thankful to say. I noticed no one who could not stand upright.

Were the proceedings noisy and roystering ?—They certainly were. I was much distressed. Whiskey was being freely distributed among the dancers. Even women were partakers. I was truly shocked.

Did you find out who was paying for the whiskey ?—Yes, it was generally known that Colonel Jago had sent in two dozen bottles.

Did you expostulate with him?—Yes, I wrote to Colonel Jago. I felt it my duty to do so.

Did he reply?—No, I regret to say.

From what you saw before you left, do you agree that the scene in the hall was little better than a drunken orgy? —No, I could not truthfully so describe it ; but there was great noise and excitement. A bottle of whiskey was broken on the floor and the smell was very strong. Two men took off their coats to fight, but peacemakers persuaded them to shake hands. They are, in fact, both worthy men. After that, I felt my presence could serve no useful purpose—as I could not control the proceedings I felt that by remaining I should appear to be countenancing them.

The floor had not buckled at the time you left ?—No. Nothing of that sort had happened.

The witness was then cross-examined by Mr. Chawlegger, who asked the witness : Do you consider that Colonel Jago's act in wishing that his friends and neighbours should drink his health, on the occasion of this yearly celebration, was reprehensible ?—No. I think it was ill-judged.

Do you know how many drinks of whiskey go to a bottle?—I have no idea.

Do you consider one ordinary dram for each guest an allowance calculated to promote a beastly, drunken orgy?—I really can express no opinion. I have never, I am thankful to say, made use of such words.

Counsel then asked : Does the rectory garden, Mr. Averil, adjoin that of the hall ?—That is so.

And have you quarrelled with Colonel Jago owing to his objection to your persisting in burning rubbish in such a way that the smoke interferes with his enjoyment of his garden?—No, sir, I have no quarrel with any man, I am thankful to know.

I put it to you, Mr. Averil, that you are not on speaking terms with Colonel Jago ?—Colonel Jago knows that I should always only be too glad to speak with him at any time. It is most

painful to me that my neighbour should avoid me.

And yet you annoyed Colonel Jago by pouring volumes of your stinking smoke into his rose garden?—Colonel Jago objected to the smoke, and perhaps I ought at once to have removed the burning of garden rubbish to another position; but as Sir Geoffrey Dollart, the previous tenant, had made no complaint, I thought a friendly remonstrance might serve to bring Colonel Jago and myself together. After I received Colonel Jago's reply, which threatened legal proceedings, I did as he wished.

And ye: you tell me you have no quarrel with Colonel Jago; no ill-feeling against him.—None, sir, I can truthfully say.

I put it to you, Mr. Averil, that you are hostile to Colonel Jago and resent his influence in the village, and have come here to satisfy your enmity by bearing witness against him?—Sir, your readiness to infer base motives does you greater discredit than you impute to me. I do indeed very deeply regret Colonel Jago's influence in the village, for I believe it to be a bad influence; and it distresses me to notice that his activities are often directed to thwarting the ambitions of his Rector for the spiritual well-being of his flock. I had no wish to speak on a matter so painful to me, but you, sir, have chosen otherwise. I have come here in the exercise of what I deem to be my duty, to testify to facts within my knowledge to the end that justice may be done.

Mr. Chawlegger: I hope, Mr. Arbitrator, the witness — the reverend gentleman—only right I should explain to Mr. Averil that it is Counsel's duty to ask such questions as—I hope the reverend gentleman will accept that no aspersions are—were intended.

Mr. Pitfall (re-examining): I understand, Mr. Averil, that there was cause of estrangement between you and Colonel Jago before the matter of rubbish-burning arose?—Must I, Mr. Arbitrator, answer that question? I had much rather not do so.

The Arbitrator: I think you must.

Witness: To me it appears to have no bearing on the matter in dispute.

The Arbitrator: Counsel is entitled to ask the question, and you must answer it.

Chawlegger: I object that the matter is irrelevant.

Pitfall: My learned friend himself raised it, and I claim, sir, my right to rebut. (The Arbitrator disallowed the objection.)

Witness: Yes, it is true. There was a previous cause—which was, in fact, the first and sole cause of my estrangement from Colonel Jago.

Counsel: Will you please tell the Arbitrator what it was?—The seats in the church are free, and were so long before I was inducted. I deem it so important that social rivalries and class distinctions should not invade gatherings together for holy worship, that I felt unable to concede to Colonel Jago what I had denied to others, namely—a private pew for his sole use. Colonel Jago resented my refusal, although I explained the reason for it, and adopted the custom of sending his butler and certain other servants directly the church was opened, to tenant the coveted pew. Shortly before, or after, the service began, Colonel Jago and his family would enter and occupy the pew, his servants taking other seats or even leaving the church. This proceeding, repeated every Sunday, I considered to be unseemly; and I also learned that a certain section of the congregation resented it, and were organizing a rival party to forestall Colonel Jago's servants. It, therefore, became necessary for me, with the support of the churchwardens, to stop the proceeding. Since that time Colonel Jago has, much to my grief, absented himself from his parish church.

The Arbitrator: We are obliged to you, Mr. Averil, for coming here today.

The defendant, DAVID WINKLETOP TOOMER, was then called and questioned by Mr. Pitfall as to his credentials and qualifications, and the nature and extent of his experience as a practising architect and surveyor. In reply to Counsel, witness stated that he received definite instructions from the plaintiff to floor the hall with American maple. The interview, when Colonel Jago gave him this instruction, was shown in his diary (produced) to have been on December 7 of the year before the hall was built. He had kept an appointment with Colonel Jago to obtain his final instructions before proceeding to prepare the contract documents, and he produced his notes taken in Colonel Jago's presence on that occasion, among which the words "floor — American maple" appeared.

Mr. Pitfall: Had you previously used American maple?—Previously? Previously to what?

To your interview with the plaintiff?—Do you mean previously to my interview with him on December 7?

Counsel: You interpret me exactly, Mr. Toomer.

Witness: No——I mean yes. You mean similar flooring to that used in the hall, don't you? Then, no. Previously to building the hall I had used maple flooring nailed to fillets let into a concrete foundation.

Counsel: You therefore knew of its propensity to swell?—Yes, I knew that—if it got damp, that is.

So that when you mentioned maple as a possible flooring for the hall in your interview with Colonel Jago on December 7, you knew the risk of its swelling?—Yes. But——

The Arbitrator: Finish your answer to the question.

Witness: Well, the maple flooring I laid on the concrete got damp owing to the concrete not being quite dry.

Counsel: In the previous case you speak of, did the floor swell and buckle?—You mean when the boards were laid on concrete?

Yes, you comprehend me perfectly, Mr. Toomer.—No, the maple flooring couldn't buckle the concrete, could it?

What happened then?—The boards curled up at the outer edges and drew the nails. I had the floor cleaned off—planed down flat. I had to do that three times——

Counsel: At any rate you——

The Arbitrator: I think you interrupted the witness, Mr. Pitfall.

Witness: Well, I was going to say that I had to have the floor cleaned off three times——

The Arbitrator: You have already told us that.

Witness: Yes, I think I said it, but I mean I had to have the floor cleaned off three times, and then, when I had had the floor cleaned off three times, the rebates of the grooves that take the tongues were nearly cut down to nothing, and they broke away and came up in splinters when the floor was danced on.

The Arbitrator: And the splinters pricked the dancers, and stuck in their feet?—Yes—at least I suppose they did—I mean I suppose the splinters did.

The Arbitrator: At any rate the dancing stopped?—Oh, yes. They had to stop dancing, they couldn't go on dancing—could they?

Mr. Pitfall: Thank you, Mr. Toomer. That is what I wanted to know. It was, you say, firmly in your mind when you saw Colonel Jago on December 7 that American maple would swell if it got damp?—Yes.

And you told him it was a risky thing to use?—Yes, I told him maple was a strong and refractory wood.

And in spite of that he ordered you to lay the floor of the hall with this maple wood?—Yes, he did. He told me to, or else I should not have done it.

Counsel then asked: Did you describe in your specification or show in your drawings the blocks and wedges between flooring and walls?—No. You see——

Please confine yourself to answering my questions, Mr. Toomer. Are the blocks and wedges necessary as part of the permanent structure of a building?—No, they are not.

If they had been a necessary part of the permanent structure you would, I take it, have drawn or described them?—Yes.

Are such blocks and wedges merely one of alternative methods a builder may use in laying a floor ?—Yes. He may if he——

Never mind that. Am I right in understanding that the use of blocks and wedges is entirely a matter of the builder's choice to suit his convenience? —Yes.

So that unless you happened to be in the building at the moment when skirtings hiding the blocks and wedges were being fixed, you would have no reason to suppose that blocks and wedges were there ?—That is exactly what I have been telling Mr. Bosson all along.

The Arbitrator : Answer the question, Mr. Toomer.

The witness seemed in confusion as to what the question was, and Counsel repeated it. Witness's answer then was—No.

Mr. Chawlegger, cross-examining : I gather you have had particular experience of maple dancing-floors, Mr. Toomer ?—Yes. I think I have.

You are an authority—an expert on the subject—a dancing-floor specialist, in fact ?—Well, I know more about it than most, I dare say.

Do you think a village hall is a likely building to be used for dances ?—Yes, I do.

So that you recognized that, as an architect, it was incumbent on you to see that in Grastopen Village Hall the floor was suitable for dancing ?—Yes. I suppose so.

We have heard you say that on December 7 you were well aware that maple was liable to swell. Will you swear that you warned Colonel Jago of that danger?—No, I dare say I did not put it that way.

What way did you put it ?—I said it was a strong and refractory wood.

So we have heard. Will you tell me why Colonel Jago decided, under your advice and with your approval, to use maple wood ?—It is a hard, clean wood, and cheap—that is why, I think.

And at that interview you undertook, as the responsible architect, to lay down a satisfactory dancing-floor of maple ?—Well——

Do not prevaricate, sir. Did you undertake to do so or did you not ?—Yes. I suppose I did.

Now, Mr. Toomer, having undertaken to lay a maple floor for dancing on, and knowing well that maple is a tough, refractory wood liable to swell irrepressibly—even to the tearing up of the nails that hold it—and that it must be free and not constrained, how was it that in your specification—the detailed exactness of which we all greatly admire—you did not give any direction to the builder on this important point ?—I suppose I must have overlooked it—there are so many things to think of. One cannot remember everything.

Mr. Twistle, cross-examining on behalf of the defendant Swillerton, asked : Are you aware that it is a common practice for such blocks and wedges as we are speaking of, to be used as fixings for the skirtings ?—Yes. That is sometimes done.

So that such blocks and wedges may, and frequently are, made a part of the permanent structure of a building?—Yes. I suppose they are.

Mr. Pitfall, re-examining : Had you any reason to suppose, by analogy, by hearsay or by experience, that air circulating against maple flooring would cause it to swell ?—No. I had not.

Did your specification direct that the blocks and wedges should be used as fixings for skirtings ?—No. Proper grounds are specified.

Will you turn up the direction to use proper grounds in this copy of your specification so that the Arbitrator may read it ? (Witness did so.)

Mr. Pitfall, addressing the Arbitrator, said that as his next two witnesses would be heard at some length, and as it was then eleven minutes to one o'clock, perhaps it would suit the learned Arbitrator's convenience to take the luncheon adjournment at once.

The Arbitrator, with the acquiescence of other Counsel, accordingly adjourned the hearing till two o'clock.

(NEXT WEEK—IV : THE DEFENDANTS CLOSE.)

ARCHITECTURE IN DAILY LIFE

BY HOWARD ROBERTSON

THE first of a series of six non-technical lectures on Present-day Architecture was given recently at the Architectural Association.

Mr. Howard Robertson, F.R.I.B.A., lecturing on "Architecture in Daily Life," said that architecture, which to a certain extent had stagnated for many years, was now taking a forward movement in response to the spreading demand that it should satisfy the needs of the day and correspond to our daily life.

It was in the designing of the house that the architect had the freest hand. The house had always reflected the domestic requirements of the day and expressed the taste or culture of its time. In the Victorian age it became rather corrupt, which he attributed largely to the influence of Ruskin with his passion for the Gothic. The house was then overloaded outside and inside. It was pretentious and seemed to express side-whiskers and a certain pomposity in living. It was perfectly frank in its badness. The present architectural style was for clean, simple exteriors, notable for their severe lines. It despised any conscious reproduction of the past. For the first time light had begun to be appreciated. The same expression of the mechanical line was seen in the furniture and fittings.

He said that the comfort of such rooms depended on whether they found reflection in the minds of the occupants. The illustrations of domestic architecture which he showed on the screen were, in the main, German. One might miss from them, he said, the flavour of softness. There was an absence of decoration. The walls were without pictures. But there was beauty, he thought, in their fine and simple lines, and they excelled in domestic comforts and conveniences.

Referring to the paucity of bathrooms in English houses, Mr. Robertson said he was inclined to think that the great reputation the Englishman got for cleanliness was owing to his having a tub brought up to his bedroom when on the Continent. But when he was asked to pay for a bathroom he would not do it, and people had to queue up, or take one the night before, or go without. The lack of ordinary decent comforts had caused a revolution, not only in plan, but in exteriors, and the desire for more mechanical efficiency, in keeping with that of the outside world, had turned our thoughts to cleaner, harder, and more mechanical exteriors.

Speaking of bureaucracy, he said the Office of Works was proposing to take over a great deal of the work previously done by architects in open competition. The reason given was that an official body could carry on its own work better, as it knew its own business. But the dangers were enormous. Individuality would rapidly disappear, and architecture would become not an art, but simply a job, like the Post Office, and probably in a few years be badly done.

Such schemes as that of Charing Cross Bridge were of great public interest. Here was a great scheme for arranging London bridges, and vitally affecting its traffic; and yet the public knew nothing about it, and were not consulted. That was an instance of what might happen when the Government took charge of all these questions.

A LONDON MOTOR COACH TERMINUS

DESIGNED BY EDWARD W. WALLIS



A general view of the approach road, 80 ft. in width, leading from Clapham Road to the station. It is flanked on either side by booking offices, restaurant, shops, etc. Upon the central island is a kiosk, with automatic arrival and departure indicator.

HERE is illustrated a sign of the times: one of the first motor coach termini to be erected in London. The object of the originators of the station was to provide for the coach-travelling public the same facilities and comfort as they enjoy when using the railways. Recognizing that the present system of picking up in the open in side streets is inadequate and unsatisfactory in many ways, their conception was a terminus whence and whither coaches would run to and from all parts of the country with the precision of a railway time-table.

Whilst in the light of the experimental experience already gained the scheme as it stands is no doubt susceptible of improvement in many ways, it must be remembered that hitherto there have been little or no data to work upon. Undoubtedly in the future coach stations will be as highly organized as the modern railway terminus.

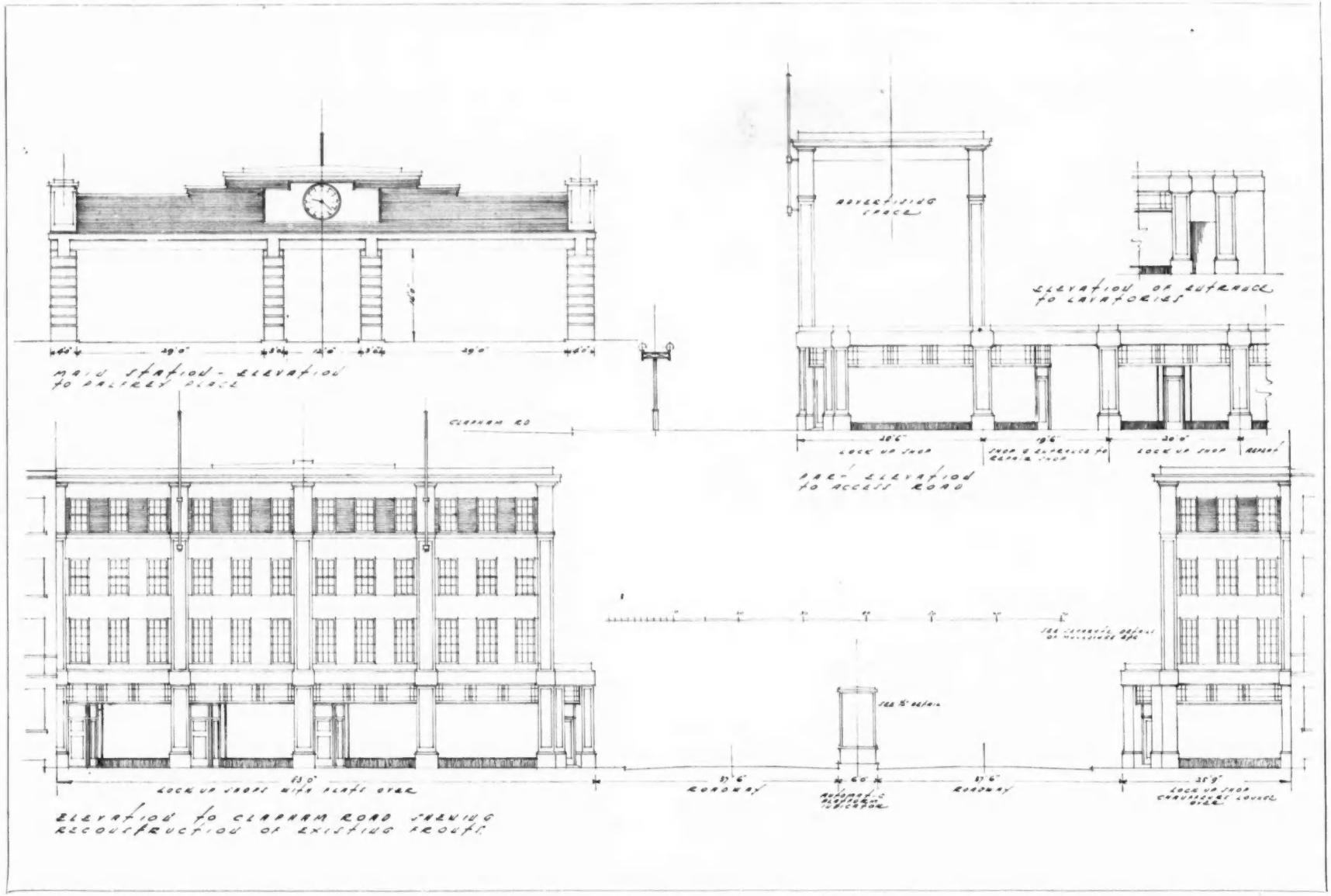
The main station, which stands back from the main road approximately two hundred feet, is 635 ft. in length by an average width of 75 ft., and is entirely covered in and top-lit. It is divided into three sections. At the rear is a filling station of 20,000 gallons capacity; in the centre is a parking space for 250 coaches; in the front are the departure platforms to which they will move up at their scheduled times. These platforms will take thirty to forty coaches at one time, and it is estimated that when the station is in full running order, 400 coaches will leave per day, and a like number arrive. The station is electrically lit at night with high-powered lamps, whilst the clocks both inside and out are electrically synchronized.

The station is approached from Clapham Road by an access road eighty feet in width, flanked on one side by a restaurant and quick-service buffet, and on the other by lock-up shops and booking-offices. On an island in the centre of this road is an automatic arrival and departure indicator, from which the passenger can tell the time of the departure of his coach and the platform. There is also attached to the station a large shop, where washing down and repairs can be carried out.

The main elevation to Clapham Road consists of lock-up shops on the ground floor, with drivers' rest rooms and dining-rooms, offices and flats on the upper floors. There is also a small hotel to provide accommodation for drivers of long-distance coaches not returning the same day. Whilst the main station, repair shops and buildings fronting on the access road are new, the Clapham Road front is merely a reconstruction of existing old premises. The whole of the work has been faced with white Portland cement stucco, with the exception of the pediment over the main station, which is in machine-made, multicolour Dorking bricks.

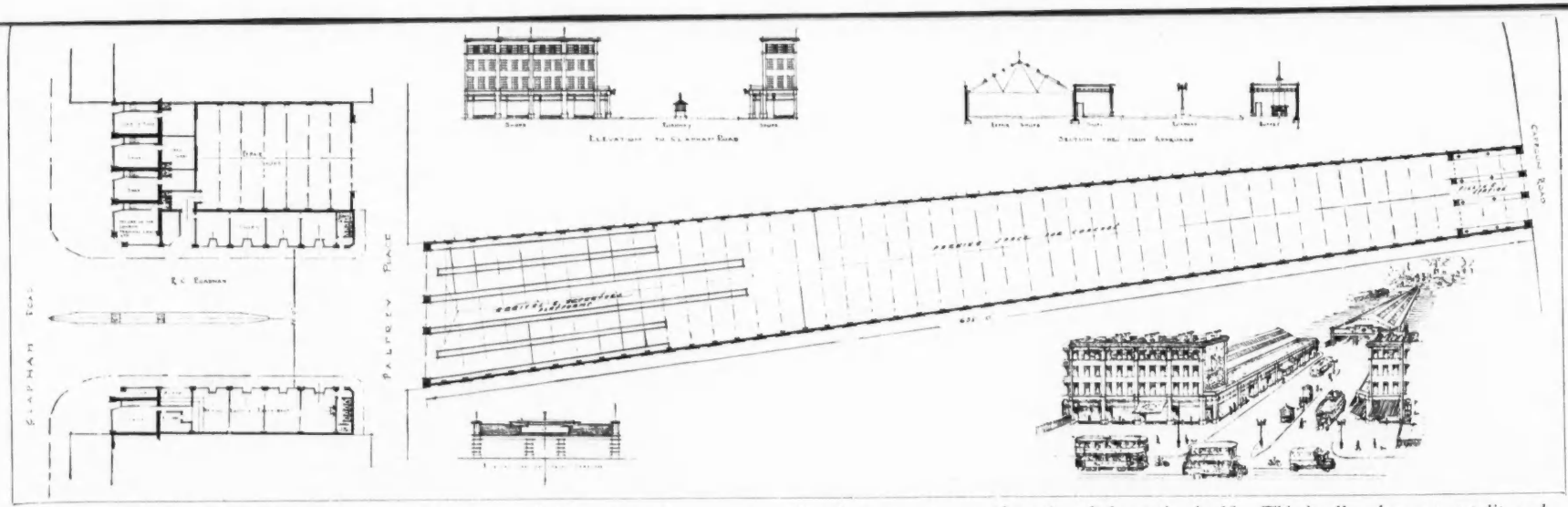
Plymouth Competition

The R.I.B.A. Competitions Committee call attention to the fact that the conditions of the Competition for designs for the Sunday School for the First Church of Christ Scientist, Plymouth, are not in accordance with the Regulations of the R.I.B.A. They are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members should not take part.

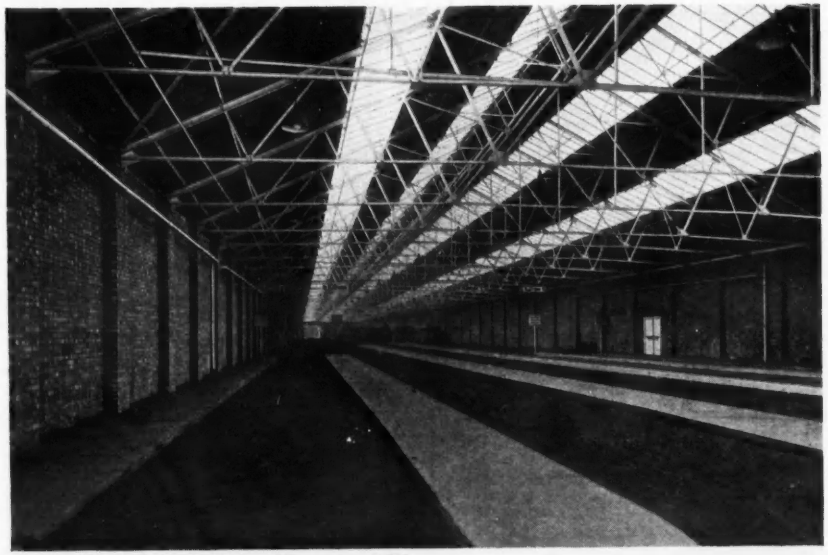


The architect's elevational drawings of the various buildings and appurtenances. The shops and offices, with residential flats above, facing on Clapham Road, are previously existing premises, refaced, with provision for advertising spaces, and reconditioned; those bordering the access road leading to the station proper are new. Among the latter ranges of buildings special provision has been made for waiting-rooms, lavatories, and a buffet, for the use of passengers, and offices for the use of the company.

buildings special provision has been made for waiting-rooms, lavatories, and a buffet, for the use of passengers, and offices for the use of the company.

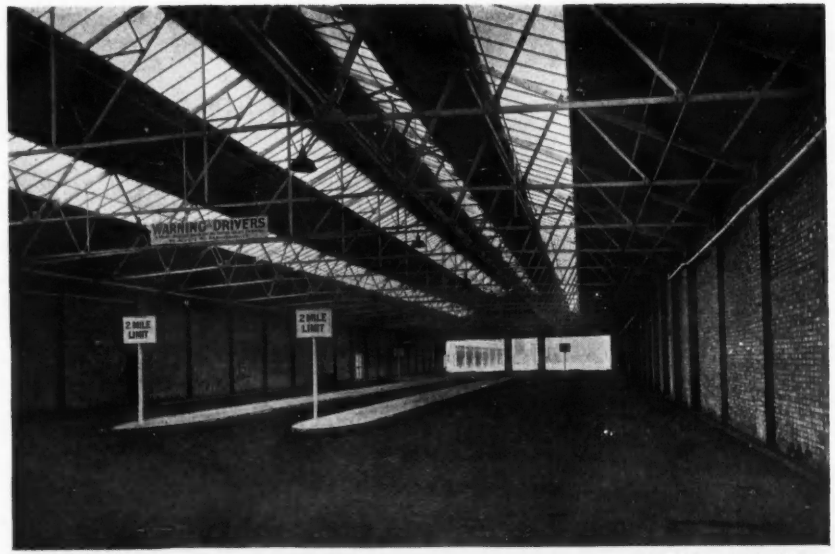


The central plan indicates the large extent of the accommodation, representing an area of 635 ft. by an average of 75 ft., of the station itself. This is all under cover, top-lit, and includes ten platforms for over 300 buses to pick up and set down passengers. The surrounding sketches give aspects of two elevations, a section, and a bird's-eye view indicating the situation and layout of the station.



London Terminal Coach Station, Kennington, S.E.]

Inside the building, looking towards the inner end, where a filling station of 20,000 gallons capacity is provided. The notice-boards show, on one side, "Passengers not allowed beyond here," and, on the other, "2-mile limit."



[By Edward W. Wallis

Looking from within towards the main entrance. Ten platforms are provided, each to take 30 to 40 coaches, and it is estimated that 400 per day will leave, and as many arrive, when the station is fully working.

LITERATURE

MODERN ARCHITECTURE AND OLD FURNITURE

IN assuming that modern art is dangerous and decadent, and as temporary a phase as was *l'art nouveau* of pre-war days, Mr. Adams-Acton is either curiously prejudiced or very far-sighted. Whether or not he is prejudiced will, I think, be obvious; but if he is far-sighted, the ordinary reader could with perfect justice say that he has allowed his eyes to wander so far towards the horizon as to lose all cognizance of what is going on around him.

Mr. Adams-Acton sets out to provide us with a book containing the best models of furniture and architecture, from which we may learn to recapture the grace and charm of other days, and, bravely assuming, as he does, that modern art is "Jazz" and "a fashionable craze," his intention is logical enough. The trouble is that in his eagerness to find this excuse for writing his book, he has failed to explore the field of modern work with sufficient thoroughness to convince his reader that his view of modern work is just.

Had he desired elegance coupled with modernity, we know that he could have found it easily enough in Denmark or Sweden, while if it were sane but charming domestic work that he wanted, what could be more easily and abundantly seen in England today? Yet he neither mentions Denmark nor Sweden nor explores the field of England's modern work beyond a glance at (1) a marble staircase in Park Lane (designed we are told in the presence of King Edward), (2) the gardens at Moor Close, (3) a Westminster Bank, and (4) a "Gothic" billiard room in a country house—an unhappy choice of examples which, apart from being markedly unrepresentative of current work in England, cannot truthfully be said to be either useful or wholly domestic.

He reveals the traits, indeed, which one has for some reason come to connect with those who dote unduly on the antique. Of these traits, lack of pure judgment is perhaps the most prominent. That the unsuitability of incorporating a Tudor interior in a French house should pass unnoticed—with approval, in fact, since it is set out by the author himself—is significant enough, but when we find him assuring us that a man is a better artist than his predecessors, because many of his figures "which were carved *to meet the requirements of architecture*" happen to be "complete in themselves," we begin to wonder whether Mr. Adams-Acton has any precision of mind at all, ignoring as he does here a prime factor in the judging of architectural decoration. After the recent discussion that has raged round the figures on the Underground building at St. James's Park Station, perhaps this indiscretion seems more glaring than it would otherwise have done; but that chance circumstance is no cause for leniency, as we find in addition that his appreciation of furniture is often unduly warped by considerations of age, rarity or historic sentiment.

That the book contains much interesting information, many good photographs both of collectors' pieces unlikely to be seen publicly, and of good examples of architecture (though the series is patchy in this respect) makes one regret very keenly that the material could not have been utilized in some more plausible form, or by an author whose sense of fitness would at least have eradicated the unfortunate taint of "Art-dealerism" from the text, which at present is a strange medley of historical data, professional knowledge of furniture—the part in which the author is most at home and most interesting—and quite amusing gossip, ending up with avuncular advice to those wishing to become good buyers and sellers of antique furniture—a whole not very shapely from a literary standpoint and inevitably pregnant with irrelevances.

If I am wrong, and Mr. Adams-Acton is justified in his condemnation of modern domestic art, then for the sake of convincing his opponents he would have been wise to have appended a series of the best modern examples to show how bad, by comparison with antique models, modern work is. Abuse alone carries little weight, and since no such comparison is facilitated, many will remain unconvinced of the decadence of current work, and will therefore fail to appreciate his excuse for the publication of the book, however interesting the incidental information and photographs may be.

The production of the volume is admirable: would that the book itself were more worthy of the trouble that has been expended upon it!

H. P.

Domestic Architecture and Old Furniture. By Murray Adams-Acton. £2 2s. Geoffrey Bles.

CANTERBURY AND ROCHESTER

THE nature of a guide-book may be said to be determined by its readers. A thirst among European travellers for accurate information, readily accessible in the order of its importance to those engaged, as most European travellers are, in skimming the cream from the best of everything that remains to be seen, has produced Baedeker.

This guide under review may be assumed to be addressed to a section of the English public that takes a semi-professional interest in the history of ecclesiastical architecture; and is led rather by the archæologically-minded clergy, than by architects. It is written largely by clergymen, who,



A view of Rochester Cathedral.

[*From* Canterbury] and Rochester, with Minster in Sheppey.]



Canterbury Cathedral and the Prior's Gate.

[*From* Canterbury and Rochester, with Minster in Sheppey.]

armed with a working knowledge of church architecture and something more of history, are exactly fitted to describe the churches they know so well, in the terms best understood by their readers.

There is, in this well-established relationship between author and reader, an exchange of enthusiasm which makes even the baldest catalogue of monuments more readable than the condensed information of Baedeker. It is as though we were being taken over the church by its cultivated rector instead of by a rapacious sacristan; and once one can be sure that we are being accurately informed, there could be no more charming way of imbibing knowledge.

As a pocket guide, I find that a great deal of detailed information, both architectural and historical, has been set down in very readable form; so that, relying only upon my memory, I have found it possible to read with interest what is written for the visitor who stands in the presence of the thing described. Good plans and maps, together with excellent photographs and a workable index, make easy the way. These things are half the battle in preparing a guide book. They engender confidence and trust in the reader.

From the description of Canterbury, its cathedral and its several churches, there emerges a very clear picture of the mediæval city of the great pilgrimage, which makes the guide more than usually interesting as a book, as it must heighten the enjoyment of the reader-visitor. I missed some fitting eulogy of the Norman work on the choir transept of Canterbury. It is worthy of the visitor's attention by reason of its fine proportions, and because there is enough of it to reconstruct the character of a whole earlier cathedral.

That is a matter of taste, and taste runs commonly away from Norman to the more properly English. Be that as it may, the omission detracts little from a guide which very clearly maintains the high level of scholarship demanded by a series of which Messrs. Bell, the publishers, may be justly proud.

E. M. F.

Canterbury and Rochester, with Minster in Sheppey. G. Bell and Sons, Ltd. Price 2s. net.

LET US TIDY UP

THE proper solution of the litter problem will have to produce a reorientation of the public mind towards the parks and pleasant places where the many take their ease, before the morning after Bank Holiday will look upon green grass instead of a distressing harvest of torn newspapers and broken bottles. The civic mind runs sluggishly on Bank Holidays. Families are large, and the day too short to look forward to tomorrow. Nothing, therefore, but a strong, inborn sense of responsibility will make the poor parents of active families see that the pitch they leave behind them on Hampstead Heath is clean and tidy.

Mr. H. H. Peach, untiring in every effort to drown ugliness and untidiness, has produced the little pamphlet, the subject of these few words, and has addressed himself to children and to their teachers. What better way of making tidiness instinctive? And how more naturally than through the agency of rhymes and doggerel, puns and disarming slogans?

This, for instance, lends itself with great effect to family and communal chanting :

> Banana skins and luncheon scraps,
> Orange peel and choc'late wraps,
> Broken bottles, torn rags,
> Kodak cases, paper bags,
> Cigarettes, and matches spent,
> Cardboard plates, and papers rent,
> Tins, and suchlike odds and ends,
> Spoil this place for other friends.

—and this, from among a collection of litter notices, strikes the right note of firmness :

> A littered landscape is a shame to England.
>
> Orange peel and papers, bury them or take them home.
>
> Bottles and tins, remove them. Left about or lightly buried,
> They are a danger to man and beast.
>
> Clear up before you leave. Others will thank you.

Slogans I like least. They tend towards rudeness : "Clear up before you clear out" would spoil a place for me. Yet I know that desperate states call for desperate remedies.

Mr. Peach reminds us that the beastly habit of spitting was cured by public opinion. So will the litter problem be cured if we persevere.

E. M. F.

Let us Tidy up. The Dryad Press, Leicester. Price 6d. net.

BUILDING DEFINITIONS AND FORMULÆ

AMONG the series of booklets, *Definitions and Formulæ for Students*, published by Sir Isaac Pitman and Sons, Ltd., is one of particular interest to architectural and building students. It has appeared from the pen of Mr. Thomas Corkhill, and provides a useful reference of building definitions and formulæ carefully selected by the author, to make the widest appeal to both student and worker. The booklet is arranged in the following six sections : Definitions, mensuration, trigonometry, structural formulæ, domestic engineering, memoranda. It should prove a useful refresher for the student preparing for examinations, and a handy reference book for the workshop or the office to tide over difficulties when textbooks are not available.

Definitions and Formulæ for Students : Building. By Thomas Corkhill. Sir Isaac Pitman and Sons, Ltd. Price 6d. net.

Architect's Estate

Mr. Keith Downes Young, F.R.I.B.A, (eighty-one), of 41 St. John's Wood Court. St. John's Wood Road, London, N.W., and of 17 Southampton Street, Bloomsbury, London, W.C., architect, partner in the firm of Messrs. Young and Hall, left £19,646.

LAW REPORTS

INCORPOREAL RIGHTS : COURT OF APPEAL JUDGMENT

Stumbles v. *Whitley. Court of Appeal. Before Lords Justices Scrutton, Greer, and Slesser*

This appeal raised an important question as to whether, where a lease of business premises included incorporeal rights over other premises, the court to which application was made for a new lease under the Landlord and Tenant Act, 1927, had jurisdiction to include in the lease similar incorporeal rights, or could only grant a lease of the corporeal hereditaments without those rights.

The appeal was by the defendant from a judgment of a King's Bench Divisional Court in favour of the plaintiff.

Mr. Barrington Ward, K.C., for the appellant, stated that by a lease dated September 28, 1921, made between the defendant and Mr. Arthur Bidwell, and Mr. A. Rees, the Royal Sands Hotel at Slapton, Devon, and certain fishing rights on Slapton Ley, were demised to Mr. A. Bidwell and Mr. A. Rees for seven years from March, 1922, at rents of £110 a year for hotel and summer fishing rights and £55 for winter fishing rights. The full benefit of that lease and the hotel goodwill were vested in the plaintiff by assignment. In March, 1928, the plaintiff, as tenant, gave notice to the defendant, as landlord, that he required a new lease to be granted to him from the date of the expiration of the lease, on the ground that he would be entitled to compensation under the Landlord and Tenant Act, 1927, but that the sum which could be awarded to him under Section 4 of the Act would not compensate him for the loss that he would suffer if he removed and carried on his business on other premises. The matter had gone before a referee and then before a county court judge, who refused to adopt the referee's report because he found that the fishing rights were not " premises " within the Act. Ultimately the matter came before the Divisional Court, who held that where a hotel was let with fishing rights, and where on the termination of the tenancy the grant of a new tenancy was ordered by the tribunal under the Act, the tenant was entitled to have the fishing rights included in a new lease. His client appealed from this decision, and counsel contended that the fishing rights did not form part of the " premises " within the meaning of the Act; that on the strict construction of the word " premises " it could not apply to an incorporeal hereditament as a fishing right.

The Court held that the Divisional Court arrived at a right conclusion and dismissed the appeal. Mr. Topham, K.C., for respondent, was not called upon to argue.

Lord Justice Scrutton, in giving judgment, said the purpose of Part I of the Act in question was to compensate tenants for improvements and goodwill. Where there were cases where that would not be a sufficient remedy, the Act provided that the tenant could serve on the landlord a notice requiring a new lease to be granted to him of the premises at which the trade or business was carried on. It had been argued that " premises " in the Act could not include an incorporeal hereditament like a fishing right. In his opinion the construction of the word " premises " in the Act related to the whole subject-matter of the lease including the fishing rights in question.

Lord Justices Greer and Slesser concurred.

POSSESSION—LEASE OF LAND—TENANCY

Ladies' Hosiery and Underwear, Ltd., v. *Parker. Chancery Division. Before Mr. Justice Maugham.*

The plaintiffs, the Ladies' Hosiery and Underwear, Ltd., sued Mr. H. A. Parker and Mrs. H. Parker, of Bradmore Lane, King Street, Hammersmith, for a declaration that the company was entitled to possession of a strip of land at the rear of shop premises known as 18 King Street, Hammersmith.

The plaintiffs asserted that the tenancy, if any, of the defendants was at the most a weekly tenancy. The defendants claimed to be yearly tenants of the property and to be entitled to be given six months' notice to quit, expiring on October 12 next following the notice.

The land was part of property in King Street comprised in a lease dated December 22, 1838, for a term expiring on September 29, 1923, and had been let by an agreement dated October 10, 1914, at a rent to be paid weekly, to Mr. Parker for three years by a Mr. Jenkins, an underlessee, whose term expired on May 9, 1923. Mr. Parker remained in possession after his tenancy had expired, paying the rent, first to Mr. Jenkins, and after March 25, 1923, at Mr. Jenkins's direction, to the Midland Bank, who had meantime become the owners of the leasehold reversion expectant on Mr. Parker's tenancy.

The plaintiff company on October 16, 1920, acquired from the owner of the reversion to the lease of 1838, and subject to that lease, a lease of 18 King Street, and the land at the rear for fifty years from September 29, 1920. About September, 1925, the plaintiff company's managing director interviewed the defendants, who understood from him that their occupation would be allowed to continue, and went on paying the rent to the bank. Notice to quit was given later. The defendants claimed that rent had been paid to the bank as agents for the owners of the land behind 18 King Street, and that the company was estopped, by the interview of September, 1925, from asserting that the rent was not paid to the bank as its agent.

His lordship held that the plaintiff company were entitled to possession of the land and that the holding over after the termination of the agreement of October 10, 1914, would have resulted only in a weekly tenancy.

CORRESPONDENCE

ELM AND WEATHER BOARDING

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I should like to refer to the increasing use by architects of waney-edged elm and oak boarding as sheeting for the outer walls of houses.

Any fad, however grotesque, can find its followers, and the originator of this particular craze has, in my humble opinion, done a great disservice to the picturesque. A material that is quite congruous in company with the naturally curved or irregular details of a timber-built country barn may become positively offensive when associated with the more precise horizontality and verticality of the lines of an ordinary domestic building.

I express this personal view in the hope that it may find some support in more influential quarters.

W. BEESTON

TWO WELL-KNOWN FIRMS AND RURAL PRESERVATION

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Messrs. J. C. Eno, Ltd., have forwarded to the Council for the Preservation of Rural England a copy of a resolution passed at a recent meeting of their Board of Directors. The resolution is as follows :

" That it be a direction to the advertising department that posters or outdoor signs should not be placed in positions where they would spoil, or tend to spoil, the beauty or amenities of their surroundings."

This follows closely upon the decision by Messrs. Shell Mex, Ltd., to remove any of their signs which may be a disfigurement.

The attitude to this problem displayed by two such well-known firms is deserving of the widest publicity.

H. G. GRIFFIN, Secretary,
Council for the Preservation
of Rural England.

ART IN ADVERTISING

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—An act of kindness is generally beset by attendant dangers. But your recent practice, or the practice of your advertisers, almost compels me to take the risk and the liberty of pointing out to you that your advertisement pages, if you persist in your present course, will soon rival in interest the substance of your Journal.

To take a more serious line, Sir, and drop my mock finger-wagging attitude, I want to tell you that the advertisements in THE ARCHITECTS' JOURNAL often give me a great deal of pleasure. And this is due, Sir, in no small degree, and I think I am far from being alone in this opinion, to the delightful drawings of Mr. J. D. M. Harvey. Advertisements intended to appeal to discriminating men—I refer, of course, to your numerous readers—will always succeed better through the art of pleasing than by bombast and assertiveness.

You have only yourself, or Messrs. London Brick Co. and Forders, Ltd., to blame, Sir—to take an instance from your New Year issue—if I am led to spending my time with Phorpres Flettons instead of perusing Rates of Wages, Prices Current, or the many articles and essays for which I originally paid my subscription.

JAMES BURFORD

SOCIETIES AND INSTITUTIONS

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS

At a meeting of the Council of the Association, Alderman Ewart G. Culpin, L.C.C., F.I.A.A., M.T.P.I., was elected President of the Association for the ensuing year. The retiring President, Major R. I. Tasker, and Mr. Alfred Stephens Cross, M.A., F.I.A.A., were elected Vice-Presidents of the Association.

ARCHITECTURAL DECORATION AND COLOUR

Mr. J. M. Holmes, A.R.C.A., of the Architectural Association, delivered a lecture at a meeting of the Architectural Association of Ireland, on "Architectural Decoration and Colour."

Mr. Holmes dealt with design generally, with interior decoration, and more particularly with the use of colour in decoration. Colour, he said, was bound up with the subject of form and pattern in decoration, whilst decoration itself was bound up intimately with design. He gave a short outline of the manner in which ideas in construction and design change.

The lecturer compared Victorian ideas with the modern tendencies. Victorian decoration could be said to have been rational, because it was the conscious expression of the Victorian outlook. But what was the outlook of the present day? It seemed to him that the touchstone of modernism was the desire to do away with pretence in all aspects of life.

THE INVENTION OF CONCRETE

Sir Banister Fletcher, P.R.I.B.A., at the Central School of Arts and Crafts on Wednesday last, delivered a lecture (the first of a series) on Roman architecture of Classic times.

He first drew attention to the influence which affected Roman architecture during the time when the world-wide Empire of Rome was at the zenith of her greatness. The Romans, he said, had an abundance of building materials at their disposal, and an expanding Empire gave birth to a variety of building needs, to meet which the Romans invented a new composite material, which was made up of broken stone and Pozzolana cement and poured like a household jelly into moulds and left to set. Then the wooden casing was removed, and the concrete remained hard and rigid.

The invention of this material was the outstanding fact in the structural aspect of Roman architecture; for this quality of rigidity made it possible to cover great areas with domes or vaults of concrete.

"IMPRESSIONS OF AMERICA"

In a talk to the Harrogate Rotary Club on "Impressions of America" Dr. H. P. Thompson, of Harrogate, said the silhouette of the skyscrapers of New York as seen from the sea was neither hideous nor beautiful, but interesting and suggestive of the power and determination of the American people. The height of the buildings made the streets sunless.

He said that the joy of collecting antiques had entered the bones of American women, and that in the near future it would take all the ingenuity of the antique dealers of Europe to satisfy the demand. Americans appeared to have no regard for the beauty of the countryside, which was littered with dumps of old motor-cars, while the roadsides were covered with blatant advertisements.

WEST YORKSHIRE SOCIETY OF ARCHITECTS

Mr. G. S. Francis delivered a lecture before the above Society on "Electric Lighting in relation to Modern Tendencies in Architecture." Mr. G. H. Foggitt presided.

Mr. Francis remarked that architecture of the past reflected, in external form, the spiritual character of its age, and in like manner, if it is to be true, modern architecture must reflect in its forms the dynamic spirit of contemporary thought and action. In former times, he said, men lived by faith, and the interior illumination of their buildings was rightly described as a "dim religious light"; but to-day men have to live more by the light of intellect, which prompts them to increase the quality and quantity of illumination in their buildings.

THE HENRY SAXON SNELL PRIZE

The Henry Saxon Snell prize is awarded by the Council of the Royal Sanitary Institute at intervals of three years, the funds being provided by the legacy left by the late Henry Saxon Snell (Fellow of the Institute). The prize this year (1930) will consist of fifty guineas and the Medal of the Institute, and is offered for an essay on "Improvements in the Sanitary Provisions of Schools." The essay, to consist of not more than 5,000 words, must be delivered on or before August 30, 1930, addressed to the Secretary of the Royal Sanitary Institute, 90 Buckingham Palace Road, London, S.W.1.

CAST CONCRETE PRODUCTS ASSOCIATION

The first annual meeting of the Cast Concrete Products Association was held at the Royal Agricultural Hall. Major F. G. P. Gedge extended a hearty welcome to the members, a number of whom had shown their keenness by travelling all night in order to be present at the Association's first birthday. He thought the large number present was a matter for congratulation, when it was remembered that a year ago there were only seven members, but in the twelve months membership had grown to twenty times that number.

The Chairman referred to the recognition the Association had received, and complimented the different subcommittees on the work that had been carried out to improve and establish the quality of certain precast units and for their researches into the crazing of cast stone; also the Executive Committee for registering the Association's Trade Mark, which implies a general undertaking on the part of members to supply goods of a high standard of quality; and, when specifications have been adopted, could be used on the actual products.

The report and provisional accounts were adopted, and Messrs. Crewdson, Youatt and Howard were re-elected as the Association's auditors.

In Messrs. Carter and Co.'s advertising Column, "An Architecture of Speed," appearing on page xxiii of our last issue, the name of Messrs. Wallis, Gilbert and Partners, the architects concerned, was inadvertently omitted from the reference to factory buildings designed by them.

OBITUARY

A. E. OWEN

We regret to record the death of Mr. A. E. Owen, principal of Messrs. Rubery, Owen & Co., which occurred on December 30.

Mr. Owen had been ill for a few weeks, and, although it was realized his condition was serious, there was great hope of his recovery. He took a deep personal interest in his works, and was known personally to numbers of the firm's customers.

The business will be carried on under the same management, and on the principles established by Mr. Owen; and in accordance with his wishes his two sons are entering the business.

TRADE NOTES

Concrete—The Spirit of the Age, is a practical record of some of the most important work of the Trussed Concrete Steel Company, Ltd., reinforced concrete engineers. Many illustrations of buildings of widely different design are illustrated, including factories, mills, warehouses, water towers, tanks and reservoirs, gantrys, bunkers and hoists, bridges, wharves and jetties, stands and pavilions, theatres and institutions, swimming baths and municipal buildings. The whole booklet bears convincing evidence of the successful blending of the practical and æsthetic qualities of a material that is taking up its position as the spirit of the industrial age. Much of the work illustrated was designed by prominent London and provincial architects.

Several changes are announced in the directorate of Messrs. Sissons Brothers & Co., Ltd., varnish, paint and enamel manufacturers. Mr. Geo. H. Dawson, joint managing director, who has been connected with the firm for over thirty-seven years, retired on December 31. New directors appointed are Mr. J. D. Bissland and Mr. R. C. Sissons; the latter is the only surviving son of the late Mr. Harold H. Sissons, a former chairman of the company. The new Board will be constituted as follows: Messrs. T. B. Sissons, chairman; O. H. Sissons, vice-chairman; and J. A. Dew, managing director; and Messrs. J. D. Bissland and R. C. Sissons, directors.

Messrs. O'Brien Thomas & Co., Ltd., have sent us a copy of their new catalogue No. 54, of fireplaces, cooking apparatus, domestic hot-water installations and sanitary appliances. In it are illustrated a large number of designs, covering every conceivable appliance for heating, cooking and sanitation. In heating there are interesting fireplace suites for the office or home, suitable for coal, gas, or electric fires, and various accessories, such as curbs, companion stands, fire-screens, and mantel registers. There are also many designs of combination grates, anthracite stoves, school grates, and domestic boilers, each with its own particular advantages to the user. A copy of the catalogue will be sent post free to any architect or builder on application to Messrs. O'Brien Thomas & Co., Ltd., at 17 Upper Thames Street, London, E.C. 4.

The report of the directors of the Sussex Brick Co., Ltd., was presented to the shareholders at the second annual meeting, held at Horsham recently. A balance of £9,686 2s. 5d. was brought forward from the previous year. The profit for the year ending September 30, including rents, dividends and interest received, amounted to £44,631 5s. 10d., against which, as directors' remuneration, taxation and interest paid has been charged a sum of £11,712 4s. 6d., leaving available for dividends, etc., £32,919 1s. 4d. Out of this there was paid an interim dividend of 4 per cent. less tax on the preferred ordinary shares on April 30, £4,800; and an interim dividend of 7½ per cent. less tax on the deferred shares was paid on May 31, £6,000. The balance to the credit of the profit and loss account on September 30 was £31,805 3s. 9d. The Directors recommend that this balance shall be disposed of as follows:—Final dividend of 4 per cent., less tax, on the preferred ordinary shares, paid October 31, 1929, £4,800; to pay a final dividend on the deferred shares of 15 per cent., less tax (making 22½ per cent., less tax, for the year), £12,000; to employees' welfare and staff bonus, £1,500; to depreciation reserve, £5,000; carry forward, £8,505 3s. 9d. During the year, the Company acquired the assets and undertakings of Messrs. Thos. Mitchell and Sons (Guildford), Ltd.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:—

Constables, Uppingham (pages 154 and 157–164). General contractors, Gee, Walker and Slater, Ltd. Sub-contractors: Wenham and Fowler, casements and hot water; J. Glenn & Co., electric light. Uppingham Quadrangle and Football Pavilion. General contractors, A. Dalby. Sub-contractors: Wenham and Fowler, casements and hot water; J. Glenn & Co., electric light.

London Coach Terminal Station (pages 173–175). General contractors, Hickman (1928), Ltd., who were also responsible for the demolition, excavation, foundation, dampcourses, asphalt, concrete blocks, reinforced concrete, bricks, fireproof construction, roofing felt, partitions, glass, patent flooring, ventilation, plumbing, sanitary fittings, door and window furniture, casements, rolling shutters, fireproof doors, plaster, metalwork, joinery, marble, tiling, and shop fittings. Sub-contractors: Adamite Co., Ltd., Atlas White Portland cement stucco used to all elevations (the adjoining shops and the buildings which flank these shops were also executed in Atlas White Portland cement stucco); Smith Walker, Ltd., structural steel; G. R. Speaker & Co., main station roof; H. Hope and Sons, Ltd., patent glazing; Pruden and Pope, electric wiring and electric light fixtures; Synchronome Co., Ltd., clocks.

House in Sheffield (pages 182 and 183). General contractor, D. Hancock. Sub-contractors: C. H. Gillam and Sons, joinery; Gibbs, sand-faced roofing tiles; Corrie and Sons and Aquaheat Co., plumbing, hot-water services and central heating; Crittalls Manufacturing Co., Ltd., metal windows; Vita Glass Marketing Board, glass.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full published specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

262. International Copperclad Co. Metallized roofing - elements. January 3.

64. Marechal, F. E. Mortar, concrete, etc. January 1.

SPECIFICATIONS PUBLISHED

311270. Rauwald, F. Box moulds for concrete constructions.

323203. Rosenberg, A. Therapeutical buildings and structures.

COMPETITION CALENDAR

February 28.—The Accrington Corporation invite architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor: Herbert J. Rowse, F.R.I.B.A. Premiums: £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars may be obtained from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before February 28.

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated in 1930. The vase is intended as a centrepiece, and may be either a simple vessel decorated in relief and colour, or an architectural composition embodying ornamental adjuncts in the round. It should not exceed eighteen inches in height, though to this dimension not more than six inches may be added for a pedestal or plinth. The decoration is to be by means of ornament applied to a ground of contrasting colour, as is the custom in this manufacture. Assessors: Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums: £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs: April 28.

THE ARCHITECTS' DIARY

WEDNESDAY, JANUARY 22

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Architectural Lighting." By R. W. Maitland. **8 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the Savoy Hotel Laundry, 19 Union Road, Clapham Road, S.W. **2.30 p.m.**

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND, Gloucestershire Branch, and the Gloucester Architectural Association. At the Municipal Art Gallery, Cheltenham. Exhibition of architectural drawings, including photographs and models. Until January 29. 10 a.m. till 5 p.m. (Wednesdays and Saturdays, 10 a.m. to 8 p.m.) **10 a.m.**

L.C.C. CENTRAL SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Town Planning and Forums of Ancient Rome and the Empire." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

THURSDAY, JANUARY 23

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. Exhibition of Books on Architecture from the Leeds Public Library, and an Address by R. J. Gordon, Librarian. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Setting out and Erection of Multiple Story Buildings." Informal Discussion to be opened by G. F. C. Caswell. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Italian Sculpture of the Renaissance." By Eric Maclagan, C.B.E., F.S.A. **5.30 to 6.30 p.m.**

FRIDAY, JANUARY 24

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. Ordinary Meeting. At the Chamber of Commerce Buildings, New Street, Birmingham. "New Underground Railway Offices, St. James's Park—Notes on Foundation and Erection." By M. J. C. McCarthy, A.M.INST.C.E. **6.30 p.m.**

SATURDAY, JANUARY 25

Sunrise, 7.50 a.m. Sunset, 4.36 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Second of Series of Six Non-Technical Lectures on Present-Day Architecture. "The House You Want." By R. Randal Phillips, Hon. A.R.I.B.A. **3 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS. Visit to London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, W.C.1. Meet at Main Entrance at 2.45 p.m. **2.45 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to Sion College, Victoria Embankment, E.C.4. **2.30 p.m.**

MONDAY, JANUARY 27

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Some Aspects of Contemporary Continental Decoration." (Lantern Illustrations.) By J. M. Holmes. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." By Harold J. L. Wright. (Lecture II.) **8 p.m.**

KING'S COLLEGE, London, W.C.2. Faculty of Arts. First of a course of nine public lectures to be held every Tuesday on "Italian Painting." By Percy Dearmer, M.A., D.D., HON. A.R.I.B.A. **5.30 p.m.**

TUESDAY, JANUARY 28

KING'S COLLEGE, Strand, W.C.2. Department of Civil Engineering. Second of a course of three lectures on "Bridges and Bridge-Construction." By C. H. Lobban, D.SC., A.M.INST.C.E. **5.30 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. "Stable Channels in Alluvium." By Gerald Lacey, B.SC., A.M.INST.C.E. **6 p.m.**

WEDNESDAY, JANUARY 29

INSTITUTION OF CIVIL ENGINEERS, Great George Street, S.W.1. Students' Meeting. "Highways, and a Survey of Future Developments." By A. H. Kennard, STUD.INST.C.E. H. Howard Humphreys, M.INST.C.E., will preside. **6.30 p.m.**

THURSDAY, JANUARY 30

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Scottish Castles." By E. M. W. B. Hughes (Mrs.), A.R.I.B.A., F.S.A. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Canaletto and Eighteenth-Century Venetian Landscape." By W. G. Constable, F.S.A. **5.30 to 6.30 p.m.**

INSTITUTION OF WELDING ENGINEERS. At the Chamber of Commerce, 95 New Street, Birmingham. "Modern Improvements: Electric Resistance Welding Machines." By C. A. Hadley. Followed by a Discussion. (Lantern Illustrations.) **7 p.m.**

SATURDAY, FEBRUARY 1

Sunrise, 7.40 a.m. Sunset, 4.49 p.m.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE ASSOCIATION OF ARCHITECTS. Dinner of the Northampton Branch at the Angel Hotel, Northampton. **6.45 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. Manchester and District Branch. Visit to works of J. G. Wagstaff, Ltd., Dukinfield.

MONDAY, FEBRUARY 3

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." By Harold J. L. Wright. (Lecture III.) **8 p.m.**

R.I.B.A., 9 Conduit Street, W.1. Business Meeting. Election of Members. **8 p.m.**

TUESDAY, FEBRUARY 4

KING'S COLLEGE, Strand, W.C.2. Department of Civil Engineering. Last of a course of three lectures on "Bridges and Bridge-Construction." By C. H. Lobban, D.SC., A.M.INST.C.E. **5.30 p.m.**

WEDNESDAY, FEBRUARY 5

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "The Appreciation of Public Art in England Through the Ages." By Dr. Tancred Borenius.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE ASSOCIATION OF ARCHITECTS. Annual Meeting at Northampton. **4 p.m.**

THURSDAY, FEBRUARY 6

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate: "That the Architectural Beauties of England be Preserved." Affirmative, E. J. Storry. Negative, G. B. Stickney. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. At the Hotel Cecil, Strand, W.C. Annual Dinner and Reunion of the Institution. No tickets will be issued after Monday, January 27. 7 for 7.30 p.m. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "The Raphael Cartoons." By A. P. Oppé. **5.30 p.m.**

FRIDAY, FEBRUARY 7

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "The Historical Background of Italian Art." By Professor Edmund G. Gardner. F.B.A. **5.30 p.m.**

SATURDAY, FEBRUARY 8

Sunrise, 6.32 a.m. Sunset, 5.51 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Third of a Series of Six Non-Technical Lectures on Present-Day Architecture. "The Creation of a Garden City." By Louis de Soissons, O.B.E., F.R.I.B.A., S.A.D.G. **3 p.m.**

MONDAY, FEBRUARY 10

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Automatic Control in Heating and Air Conditioning Installations." By B. T. Wingfield. Light refreshments at 6.30 p.m. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. "Recent Developments in the Protection of Three-Phase Transmission Lines and Feeders." By T. W. Ross and H. G. Bell. **7 p.m.**

TUESDAY, FEBRUARY 11

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. First of a course of three lectures on Electrical Transmission by Overhead Lines (1) "The Mechanical Aspects of Overhead Transmission Lines, including Conductors, Insulators and Supports." By Charles W. Marshall, B.SC., M.I.E.E. **5.30 p.m.**

ARCHITECTURAL SOCIETY, University College, Gower Street, W.C.1. Centenary Appeal. The Society presents: R.U.R., by Karel Capek, in the College Gymnasium. Tickets, 3s. 6d. and 2s. 4d. (Also February 12 and 13.) **8 p.m.**

THURSDAY, FEBRUARY 13

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Print Making and Collecting." By W. M. Keesey, M.C., A.R.I.B.A., A.R.C.A., A.R.E. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Welding." By Major James Caldwell, M.INST.C.E. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Early Italian Engravings." By Professor A. M. Hind, O.B.E., F.S.A. **5.30 p.m.**

SATURDAY, FEBRUARY 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to the Home Office Industrial Museum, Horseferry Road, Westminster, S.W.1. Meet at entrance. **2.15 p.m.**

MONDAY, FEBRUARY 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "The Thames Valley Preservation Scheme." By Professor Patrick Abercrombie, M.A., F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture I.) **8 p.m.**

TUESDAY, FEBRUARY 18

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Second of a course of three lectures on Electrical Transmission by Overhead Lines. (2) "Electrical Characteristics of Lines, Resistance, Inductants, Capacitance, Effects of Atmospheric Conditions on Insulation." By Charles W. Marshall, B.SC., M.I.E.E. **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. General Discussion on "Problems in Illuminating Engineering." Light refreshments at 6.30 p.m. **7 p.m.**

WEDNESDAY, FEBRUARY 19

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. Cantor Lecture, "Alfred Stevens: Architect-Sculptor-Painter." **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Honan Night. "Modern Architecture of Sweden." By B. B. Lewis.

THURSDAY, FEBRUARY 20

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate: "That under the present system of Competitions in England, the progress of Architecture is being retarded." Affirmative, J. G. Sidebottom. Negative, T. F. Firth. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Italian Furniture." By H. Clifford-Smith, F.S.A. **5.30 p.m.**

FRIDAY, FEBRUARY 21

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Royal Observatory, Greenwich." By Sir Frank Dyson, Astronomer Royal. **5 p.m.**

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE, Gower Street, W.C.1. "The Infirmary of the Mediæval Monastery, with special reference to the Abbey of Westminster." By Professor Percy Flemming, F.R.C.S. (Lantern Illustrations.) **5.30 p.m.**

SATURDAY, FEBRUARY 22

Sunrise, 6.0 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Fourth of a Series of Six Non-Technical Lectures on Present-Day Architecture. "Decoration and Furnishing." By G. G. Wornum, F.R.I.B.A. **3 p.m.**

MONDAY, FEBRUARY 24

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Designing for the Film." By Lawrence Irving. 8 p.m. Exhibition of Film Settings (until March 22). **8 p.m.**

TUESDAY, FEBRUARY 25

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Last of a course of three lectures on Electrical Transmission by Overhead Lines. (3) "Typical Transmission Lines in use in Great Britain; Characteristic Features of Low, Medium and High Voltage Construction." By Charles W. Marshall, B.SC., M.I.E.E. **5.30 p.m.**

THURSDAY, FEBRUARY 27

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Social Life and Art in France during the Eighteenth Century." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Ferro-Concrete Cooling Towers." By T. J. Grueritte. **6.30 p.m.**

FRIDAY, FEBRUARY 28

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. Ordinary Meeting. At the Chamber of Commerce Buildings, New Street, Birmingham. "Types of Movable Bridges." By J. D. Vaughan, M.SC., A.M.INST.C.E. **6.30 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

Plans passed by the COULSDON U.D.C.: Completion of church, St. James's, Riddlesdown, for the Rev. C. V. Rowe; house, Byron Avenue, for Mr. C. L. G. Morgan; three houses, Hilltop Road, Whyteleafe, for Messrs. E. O'Sullivan, Ltd.; five shops, Whyteleafe Estate, for Messrs. O'Sullivan, Ltd.

The HACKNEY B.C. has prepared a preliminary scheme for extending the town hall at a cost estimated by the borough engineer at £150,000.

The L.C.C. Housing Committee is to prepare improvement schemes for unhealthy areas in HACKNEY, and for the provision of re-housing accommodation on the sites.

Plans passed by the HACKNEY B.C.: Workshop, 140 King Edward's Road, for Mr. J. Krasner; factory, Wilton Road, for Messrs. J. Pritchard and Son; building, rear of 49-55 Paragon Road, for Mr. W. G. Chapman; building, Fremont Street, for Mr. E. Murray; building, Exmouth Place, for the Commercial Motor Transport Co.

The LEWISHAM B.C. is seeking sanction to borrow £9,750 for the erection of disinfecting and cleansing stations at the Wearside Road depot.

Plans passed by the LEWISHAM B.C.: Nine houses, Clarendon Road, for Messrs. McCulloch and Kingslake; eighteen houses, Boveney Road, for Messrs. Wm. Wilmot, Ltd.; additions, "Rutland Hotel," Perry Hill, for Messrs. L. & W. Whitehead; twelve houses, Ravensbourne Park, for Messrs. F. N. Sutton and F. C. Benstead; eleven houses, Algernon Road, for Mr. J. H. Bolton; additions, 100, 102 and 104 High Street, for Mr. S. Clough; partially rebuilding 44 Rushey Green, for Mr. P. J. Westwood; two houses, Lowther Hill and Brockley View, for Messrs. H. & D. Winn; four houses, Bournville Road, for Mr. G. Tryhorn; house, Netherby Road, for Mr. H. Mansbridge.

Plans passed at PURLEY: House, Copse Hill, for Mr. J. G. Cooper; two houses, Brancaster Lane, for Mr. W. J. Frewing; house, Hartley Old Road, for Mr. A. Skull; house, Downlands Road, for Mr. R. D. Taylor; four houses, Old Lodge Lane, for Old Lodge Estates, Ltd.; house, Hartley Old Road, for Mr. F. A. Freeman; house, Higher Drive, for Mr. F. Gent.

At a meeting of the Coulsdon U.D.C. it was reported that schemes for about 1,000 houses were in course of preparation in the SANDERSTEAD Ward.

Plans passed at SANDERSTEAD: House, Heathhurst Road, for Mr. F. W. Thomas; house, Purley Bury Close, for Mr. W. J. Frewing; house, The Ridge Way, Fox Farm Estate, for Mrs. C. J. Butler; house, West Hill, for Mrs. E. M. Stilby; house, West Hill, for Mr. A. N. Dawson; house, Addington Road, for Mr. F. Knight.

The City of London Electric Lighting Company, Ltd., is considering a scheme for the extension of the power station in SOUTHWARK.

SOUTHERN COUNTIES

The EASTBOURNE Corporation has obtained sanction to borrow £12,374 for the erection of twenty-eight houses on the Victoria Drive site.

The HASTINGS Corporation has under consideration a scheme for the provision of a central fire station, at an estimated cost of £17,000, and has obtained sanction for a loan of £5,000, for the extension of the museum in St. John's Place.

Plans passed by the HASTINGS Corporation: Extensions, Shaftesbury Home, Old London Road, for the Shaftesbury Society; motor showroom, 3 Mercatoria, St. Leonards, for Messrs. J. H. Hobbs and Son; restaurant, 23 Robertson Street, for Messrs. Callow and Callow (architects); two houses, Battle Road, St. Leonards, for Messrs. Pettet Bros.; two houses, Alfred Road, for Mr. H. M. Jeffery (architect); new road, Charles Road, St. Leonards, for Mr. H. M. Jeffery (architect); additions, 22 and 23 Queen's Road, for Messrs. Ward, Son and Wray (architects); lock-up garages, Broomgrove Road, for Mr. L. Towner (architect); additions, 265 London Road, for Mr. J. E. Maynard (architect); house, Amberst Gardens, for Mr. H. Burleigh (architect); shop front, Grand Parade, St. Leonards, for Messrs. Bainbridge and Son.

The PLYMOUTH Corporation has obtained sanction to borrow £26,748 for the erection of fifty houses at Grassendale Avenue.

The PLYMOUTH Corporation is to lay mains for the improvement of the water supply at Cattedown, at a cost of £175,000.

The PLYMOUTH Corporation has obtained sanction for a loan of £19,500 for the provision of nurses' quarters at the Mental Hospital.

Plans passed by the PLYMOUTH Corporation: Eight houses, Vapron Road, for Mr. W. A. Heath; two houses, St. George's Avenue, for Mr. F. J. Squance; seven houses and three shops, Peverell Park Road, for Messrs. Tozer Bros.; alterations, 51 Union Street, for Mr. A. W. Overall; alterations, 17 Cornwall Street, for Messrs. Freeman, Hardy and Willis, Ltd.; eight houses, Salisbury Road, for Messrs. F. J. and A. Coad; garage, etc., Laira Bridge Road, for Western National Bus and Transport Co., Ltd.

The PLYMOUTH Corporation is to undertake a scheme for repairs at council houses at a total cost of £53,000, chiefly in respect of rough-casting and remedying dampness.

Plans passed at POOLE: Dwelling house and garage, Pinewood Road, for Jackson and Greenen; four shops and dwelling houses, corner Wimborne Road and Lester Road, for Burt and Vick; dwelling house, corner Boulnois Avenue and Frankland Crescent, for Jackson and Greenen; dwelling house, Brixey Road, for R. C. Webber; dwelling house and garage, Compton Avenue, for R. J. Bishop; National Provincial Bank, 213 High Street, for F. C. R. Palmer; amended drainage plan of dwelling house, Banks Road, for Hawker, Mountain and Bailey; proposed lodge off Canford Cliffs Road, for S. Tugwell; amended plan of dwelling house and garage, Western Avenue, for A. Barnes; alteration and addition to store, Serpentine Lane, for E. Snook; two dwelling houses, Lincoln Road, for B. W. Bailey; dwelling house and garage, corner Canford Cliffs Road, and Western Avenue, for M. Clarke; additions, garages and staff quarters over Sandbanks Hotel, Banks Road, for D. F. Hilliar; dwelling house, Brudenell Road, for W. B. Chinchen; dwelling house, Frankland Crescent, for W. B. Chinchen; garage, pump house and oil store, Ballard Road, for Russian Oil Products Ltd.; alterations and additions, "The Britannia Hotel," Britannia Road, for P. J. Newby Vincent; bungalow, off Hunt Road, for S. E. Bracher; dwelling house, Anthony's Avenue, for A. Musgrove; proposed new road off Hunt Road, for Maggs and Maggs; garage, "Romary Cottage," corner Western Road and Martello Park Road, for Mrs. C. Dixon; garage, "Burlington," Tatnam Road, for S. Withers; garage, "Sandy Keld," Panorama Road, for G. A. Reddy; garage off Oakfield Road, for R. J. Trent; conservatory and covered way, Kingsbridge Road, for O. R. Mulley.

Plans passed by the PORTSMOUTH Corporation: Alterations and additions, 214 Commercial Road, for the Halifax Building Society; additions and alterations, 58c London Road, for Messrs. Parks, Ltd.; club-room, "The Old Oyster House" public-house, Milton Docks, for Portsmouth and Brighton United Breweries, Ltd.; fifteen houses, Compton Road, for Mr. A. J. Chase; public-house, Cobden Avenue, for Portsmouth and Brighton United Breweries, Ltd.; additions, Royal Portsmouth Hospital, Commercial Road, for the Governors-Royal of the hospital; public-house, Highbury Estate, Cosham, for Portsmouth and Brighton United Breweries, Ltd.; four houses, Kirby Road, for Mr. W. Ford; kitchen blocks, Royal Portsmouth Hospital, for the Governors of the hospital.

SOUTH-WESTERN COUNTIES

The BRISTOL Corporation is seeking the requisite Parliamentary powers for a scheme for the construction of a new road from Stokes Croft to Victoria Street, including a bridge across the floating harbour, at a total cost of £405,000.

The Co-operative Wholesale Society, Ltd., is to erect buildings in Broad Quay, BRISTOL, at a cost of £50,000.

The BRISTOL Corporation is seeking power to proceed with a scheme for the erection of a maternity home at a cost of £32,000.

The BRISTOL Corporation is seeking Parliamentary powers for a scheme for the erection of a new market at a cost of £204,680.

The BRISTOL Corporation is seeking sanction to proceed with the acquisition of land at a cost of £118,000 in connection with the provision of new municipal buildings.

The Ministry of Health has sanctioned the proposal of the BRISTOL Corporation to use a site in the Dame Emily playground, for the erection of baths.

The BRISTOL Education Committee estimates that the cost of the provision of school accommodation in connection with the raising of the school-leaving age will be £462,000.

The TORQUAY Corporation Electricity Committee is seeking sanction to borrow £19,800 required for extensions to buildings.

The TORQUAY Education Committee is asking the Devon Education Authority to take the necessary steps for the erection of a new school of arts and crafts on the Torville site.

Plans passed by the TORQUAY Corporation: Layout, Furzewell building estate, St. Marychurch Road, for Mr. S. Vanscolina; additional story, 17 Abbey Road, for Mr. C. Hilton; alterations and additions, Rock Road, for the Sanitary Steam Laundry Co.; alterations, 13, 14 and 15 Strand, for Messrs. Bobby & Co., Ltd.; shop and offices, Fleet Street, for Messrs. Gaters; alterations and additions, "Temple Lodge," Castle Road, for the Y.M.C.A.; workroom and office, 43 Union Street, for Messrs. Eastmans, Ltd.; house, Newton Road, for Mr. C. Moxham; shop and house, Cadewell Lane, Shiphay, for Mr. F. E. Wilson; bungalow, Teignmouth Road, for Mr. C. Lax; house, Barnfield Road, Livermead, for Mrs. Strong; layout for forty-three houses, Barton Road, for the executors of Mr. G. E. Tozer; house, Teignmouth Road, for Lady Singer; two houses, Ley's Road, Chelston, for the Chelston Building Co.; bungalow, Lower Audley, for Messrs. H. Kershaw & Co.; alterations and additions, Livermead House Hotel, for the hotel company; two houses, Avenue Road, for Mr. P. D. Cavanna; four houses, Westhill Road, for Mr. F. Maule.



House, Whirlowdale, near Sheffield. Designed by C. M. Hadfield and R. Cawkwell. The main front. The house is situated about four miles S.W. of Sheffield, and is built of local grit stone; metal casement windows have been fitted. The roof is covered with sand-faced tiles. On the right of the illustration is the garage.



House, Whirlowdale, near Sheffield. Designed by C. M. Hadfield and R. Cawkwell. The garden front. The entrance through the loggia gives on to the hall, which adjoins the lounge and dining-room. The study and kitchen are situated on the right and left of the main entrance, respectively. On the first floor are an upper hall, four bedrooms and two bathrooms. Above the loggia is a balcony.

EASTERN COUNTIES

Plans passed by the BEDFORD Corporation: House, Kimbolton Road, for Mr. H. H. Breeden; house, Kimbolton Road, for Mr. F. Roberts; four houses, Putnoe Lane, for Mr. F. Dickens; six houses, Rosamond Road, for Mr. E. H. C. Inskip; alterations to caretaker's quarters, town hall, for the Bedford Corporation; two houses, York Street, for Mr. E. H. C. Inskip; house, Cutcliffe Place, for Messrs. H. Young and Son; four houses, Elstow Road, for Messrs. C. A. White; two houses, Elstow Road, for Mr. G. P. Allen; extension, 7 Midland Road, for Messrs. F. W. Woolworth & Co., Ltd.; house, Bradgate Road, for Mr. F. W. Bellamy.

Plans passed by the LOWESTOFT Corporation: Bungalow, Winnipeg Road, for Mr. J. A. Foster; two houses, Colville Road, Oulton Broad, for Mr. A. E. Ingles; offices and stores, Economy Road, for Mr. J. Rout; ten houses, Kimberley Road, for Mr. J. Gaze; house, Corton Road, for Mr. C. G. Allerton; house, Carlton Road, for Mr. W. Howes; additions and alterations, Clapham Road, for Lowestoft Co-operative Society, Ltd.; two houses, The Avenue, for Messrs. Critoph and Crowe.

MIDLAND COUNTIES

The DUDLEY Corporation is obtaining a report as to the erection of further houses on the Cradley Road site.

The DUDLEY Corporation has been asked to reserve a site on the Priory Estate, for the erection of a church in connection with the Free Churches of the borough.

On behalf of the Northants Education Committee, Mr. R. J. Williams, of Kettering, has prepared plans for the erection of a school for 300 pupils at FINEDON, at an estimated cost of £10,000.

The MARKET HARBOROUGH U.D.C. has decided upon the erection of a further fifty houses on a site of twenty-three acres of land.

The NORTHAMPTON Corporation has prepared a main drainage scheme for the St. James's district, at a cost of £51,500.

The Ministry of Transport has approved the schemes of the NORTHANTS C.C. for the reconstruction of the Stoke Bruerne and Deanshanger canal bridges.

The Northants Education Committee has purchased a site at PASSENHAM for the erection of an elementary school.

The Northants C.C. has purchased land for the scheme for the construction of a bridge over the level crossing at WELLINGBOROUGH.

Col. John Brown, of Northampton, has prepared plans for the Northants Education Committee, for the erection of two schools at WESTON FAVELL, each to accommodate 300 children, at a total cost of £27,000.

NORTHERN COUNTIES

The West Riding Education Committee has agreed upon plans for the erection of a technical institute at BARNOLDSWICK at a cost of £16,500, and has chosen a site in West Street, Hoyland, for the erection of an infants' school at a cost of £7,500.

The BARNSLEY Housing Committee is considering the question of additional housing sites.

The BIRKENHEAD Corporation Baths Committee has prepared a scheme for the erection of baths at Byrne Avenue at a cost of £46,000.

The BOLTON Education Committee is to secure a site in the Great Lever district for the erection of a senior school.

The BOLTON Corporation has decided to offer H.M. Office of Works a site in Great Moor Street for the erection of a labour exchange.

The BOLTON Corporation has authorized the borough engineer to proceed with the demolition of properties required in connection with the central area improvement scheme.

The Chesterfield Education Committee has submitted to the Board of Education for approval preliminary plans for the provision of a modern boys' school at BOYTHORPE at a cost of £18,666.

The BRADFORD Corporation has sold land in Leach Square to H.M. Office of Works for the erection of a telephone exchange.

The BRADFORD Corporation has authorized the demolition of further property in connection with the central area development scheme.

The BRADFORD Corporation has decided to proceed with the erection of a new institution at Westwood to provide accommodation for 120 male and 120 female defectives, at an estimated cost of £105,000.

The Durham County Water Board is to commence the scheme for the BURNHOPE reservoir, at a cost of £1,250,000.

The CHESTERFIELD Corporation is negotiating for various plots of land for the erection of houses.

The CHESTERFIELD Corporation has asked the Baths Committee to consider the erection of public baths in the Stonegravels area.

The CHESTERFIELD Education Committee has forwarded the plans to the Board of Education for the completion of the reconstruction of Highfield Hall.

Plans passed by the CHESTERFIELD Corporation: Three houses, School Board Lane, for Miss E. Clarke; two houses, Brocklehurst Piece, for Messrs. W. and E. Dolphin; new Crooked Spire Inn, Church Lane, for Brampton Brewery Co.; alterations, Turf Tavern, Holywell Street, for the Chesterfield Brewery Co,. Ltd.; office, off Wharf Lane, for Shell Mex, Ltd.

The West Riding Education Committee has approved revised plans for the erection of a secondary school at HARROGATE, at a cost of £72,000.

The West Riding Education Committee is proceeding with extensions at HEMSWORTH secondary school at a cost of £11,755.

Another large section of the scheme of new buildings for the University of LEEDS will shortly be commenced, plans having now been approved for the new building to accommodate the Department of Chemistry—Inorganic, Organic and Physical. This Chemistry building stretching, when completed, from the Physics Department to Woodhouse Lane, will, together with the mining block at right angles to it, form the north elevation of the new scheme. The east elevation will run alongside Woodhouse Lane for a distance of about 180 feet and at its lower end another wing, containing a number of large laboratories, will reach back a distance of 240 feet towards the Physics building, and will form the southern side of the rectangle of which the complete building will consist. The erection of certain portions of the Chemistry block is being postponed, but even with this omission the building shortly to be started will have a floor space of some 95,000 square feet. At the moment, bills of quantities are being prepared, but it is expected that tenders will be invited in about two months' time.

Plans passed by the MANCHESTER Corporation: Alterations to bank, 90 Cross Street, John Dalton Street and Four Yards; alterations, 82 Market Street and Sickle Street; rectory to church of Our Lady and St. Thomas, Balmain Road, Gorton; store, Hope Street, Gorton; additions to works, Birch Street, City Road, Hulme; additions to offices, Sparkle Street, Store Street, Ancoats; shops, offices and restaurant (amended plan), Quay Street; eighteen houses, Chain Road and Symond Road, Blackley; club, Mauldeth Road and Burnswick Road, Withington; additions to bakery, Farmside Place, Levenshulme; eight shops and houses, Burnage Lane, Burnage; market hall and four shops, Barlow Moor Road, Chorlton-cum-Hardy; twelve shops and houses, Barlow Moor Road, Maitland Avenue, West Didsbury; seven houses, Meltham Avenue, West Didsbury; shop and house, Nuthurst Road, Moston; eight shops and houses, Burnage Lane, Burnage; seven houses, Barlow Moor Road, Chorlton-cum-Hardy; 638 houses, West Didsbury Housing Estate; twelve shops and houses, Barlow Moor Road, West Didsbury.

The MANCHESTER Corporation has obtained the general approval of the Minister of Health to the Corporation's programme for the erection of a further 10,000 houses, and the Housing Committee has authorized the preparation of a further plan, showing a detailed layout of portions of the estate to accommodate approximately 10,000, at Wythenshawe.

The West Riding Education Committee has obtained a site in Syndale Road, NORMANTON, for the erection of a senior school.

The OLDHAM Corporation proposes to secure land centrally situated, as a site for the erection of a municipal workshop for blind people.

The Central Electricity Board has obtained a site at Slacks Valley, OLDHAM, for the erection of a substation.

The PONTEFRACT Education Committee is to erect an elementary school for 420 children.

The Board of Education has approved plans of new buildings for the PONTEFRACT King's School, at a cost of £30,920.

The SALFORD Corporation is being asked to consider the advisability of promoting a Bill to enable the Corporation to erect an exhibition hall on the cattle market site.

The SHEFFIELD Corporation has arranged for the provision of housing accommodation for 782 families on the Spring Street area.

The SOUTH SHIELDS Corporation is negotiating for land at East Jarrow for a housing scheme.

On behalf of the Riverside Tenants Co., Messrs. J. H. Morton and Son, architects, have prepared plans for the erection of forty-six tenement houses at Hardings Bank, SOUTH SHIELDS.

The SOUTH SHIELDS Corporation has instructed the borough engineer and the medical officer of health to prepare an improvement scheme for a slum area.

Plans passed by the STRETFORD U.D.C.: Fourteen houses, Ruskin and Wordsworth Roads, for Messrs. Smith and Allcock, Ltd.; house and shop, Ming Street, for Mr. J. A. Hardy; 130 houses, Barton and Melville Roads, for Mr. J. W. Maunders; alterations, Lyceum Theatre, for Mr. W. Stansfield; additions, Gorse Hill School and Victoria Park School, for the Stretford Education Authority; additions, Chester Road, for Messrs. Colmore Depot, Ltd.; office, Ashburton Road, for Messrs. Brown and Tawse.

The SUNDERLAND Corporation is considering plans for the enlargement of the mental hospital.

The Manchester Education Committee is to erect a school for 750 pupils at WITHINGTON, at an estimated cost of £21,000.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Abergavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury ..	S. Counties	1 4	1 0
B_2	BANBURY ..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_2	CAMBRIDGE	E. Counties	1 6	1 1½
B_2	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_1	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7	1 2½
B_1	EAST-BOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B_2	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno ..	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle ..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke ..	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport ..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_1	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour;* LABOURER, 1s. 4d. *per hour;* NAVVY, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

	£	s.	d.
Portland cement, per ton	2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1 3 0	*Trailer*	£0 15 0
3-ton motor lorry	3 15 0	*Steam roller*	4 5 0
Steam lorry, 5-ton	4 0 0	*Water cart*	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
If left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 4d. *per hour;* TIMBERMAN, 1s. 5½d. *per hour;* BRICKLAYER, 1s. 9d. *per hour;* PLUMBER, 1s. 9d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Stoneware pipes, tested quality, 4 in., per ft.	0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour;* LABOURER 1s. 4d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour.*

	£	s.	d.
London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 9d. *per hour;* DO. *fixer,* 1s. 10d. *per hour;* LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

	£	s.	d.
Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour;* TILER, 1s. 9d. *per hour;* SCAFFOLDER, 1s. 5d. *per hour;* LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2

Cement and sand, see "Excavator," etc., above.

Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms		6 7 0
Grey-green do.		5 9 0
Green peggies, 12 in. to 8 in. long		4 13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour;* JOINER, 1s. 9d. *per hour;* LABOURER, 1s. 4d. *per hour.*

	£	s.	d.
Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE OF soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅜ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ⅛ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour;* LABOURER, 1*s.* 4*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.
The measured work price is on the same basis . . . per ft. sup. £0 0 2½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards. plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¼ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ⅜ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

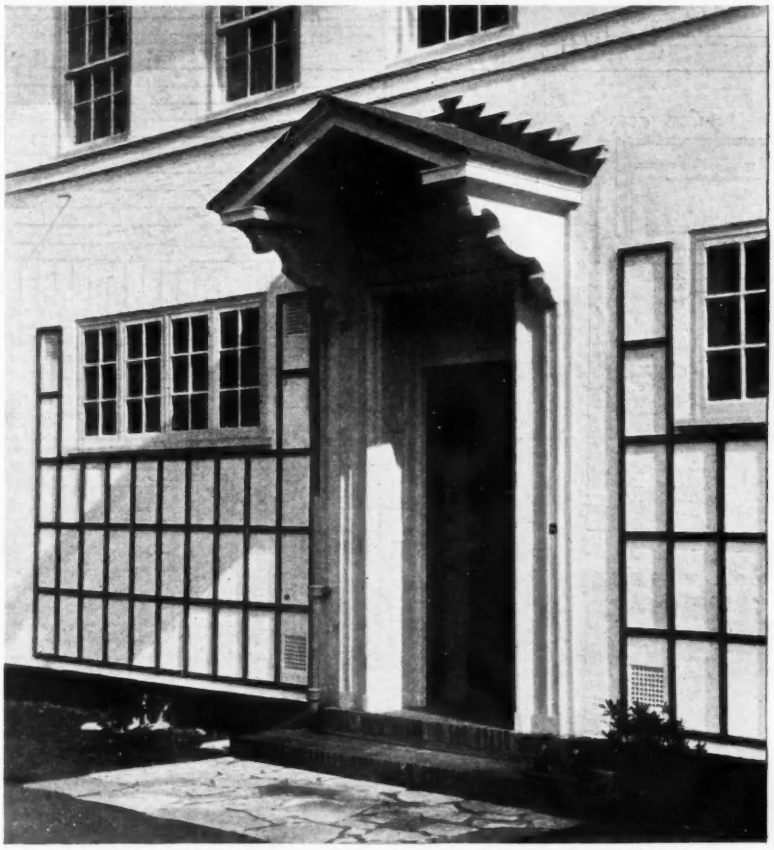
PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	3	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

Green Bushes, Weybridge:



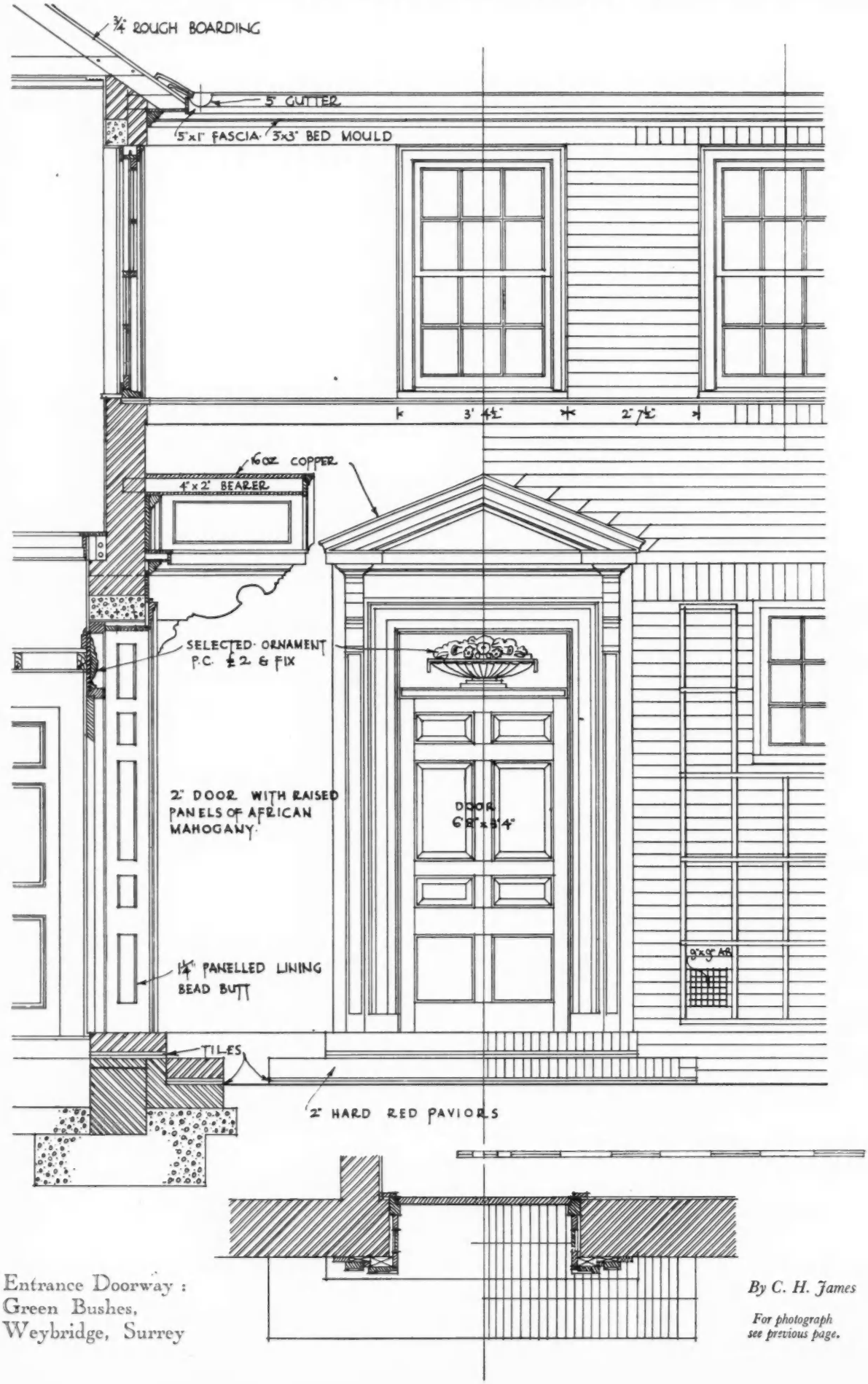
The Garden Front



HOODED DOORWAY: GREEN BUSHES, WEYBRIDGE, SURREY
By C. H. JAMES

THE house was built of London stock bricks, heavily distempered, creamy white, the joints of the brickwork being dinged, i.e. not pointed but dragged over to give that velvety texture which is so pleasant in old colour-washed brick buildings. The plinth is tarred up to floor line. The walls are 14 inches thick on the ground floor and 9 inches above, and the 9-inch work has proved perfectly satisfactory from the point of view of keeping out the weather, owing to the distempering and the widely projecting eaves.

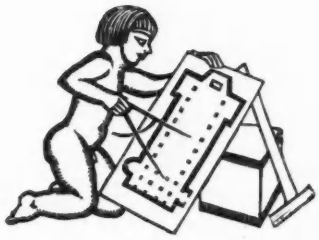
The doorway itself is constructed entirely of wood, and the attempt to give shelter without providing any direct support to the hood necessitated care in the design of the brackets. The blind panel over the door was intended to contain a low relief carving, but this, as is so often the case with decorative details, was omitted for the sake of economy. The hood is covered with copper, and the door painted viridian green. For working drawing, see overleaf.



Entrance Doorway :
Green Bushes,
Weybridge, Surrey

By C. H. James

For photograph see previous page.



WEDNESDAY, JANUARY 29, 1930

OLYMPUS UNCHALLENGED BY OLYMPIA

"If the accepted design for the proposed new home of the R.I.B.A. were to be in the style of Olympia, the august institution would be split from top to bottom. But there is an obvious difference between an exhibition hall and a building intended to express for a hundred years or more the cultural status of a great profession."

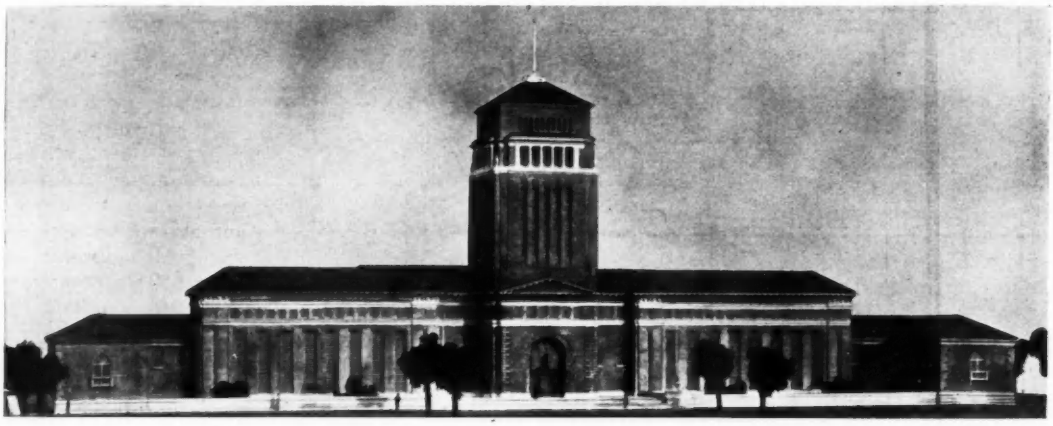
THERE could be no more appropriate place for what may be described as "experimental architecture" than an exhibition hall. For often the objects displayed in such a hall themselves partake of this experimental character, and the very term "exhibition" calls to one's mind something temporary and transient. Even the most convinced respecter of tradition, therefore, will welcome the new Olympia designed by Mr. Joseph Emberton, because it provides a means of "trying out" certain architectural ideas which, even if not all can be expected to agree with them, are deserving of our respect.

Of course, if by some strange dispensation of fortune it came about that the accepted design for the proposed new home of the Royal Institute of British Architects were to be in the style of this Empire Hall at Olympia, the august institution would be split from top to bottom and there would be formed a rival society, not entirely composed of senior members, who would decline to acknowledge allegiance to a body which had deliberately housed itself in such a building. There need be no mistake about that. But the new Olympia carries no challenge to Olympus. No bones will be broken over it, for there is an obvious difference between an exhibition hall designed to give satisfaction to an individual company, and a building which is intended to express for a hundred years or more the cultural status of a great profession. At Olympia we may all relax, for we know that if the logic expressed in its design is but a part of that architectural logic by which a great building may be informed, the fact is not of too solemn significance.

"Logic" is, indeed, a magic word, and when we are told that the design of the new Olympia is logical we are immediately prepared to accept it with enthusiasm. Too long has there been an entirely unjustifiable divorce between art and logic. We are getting tired of the word "taste," and we are longing for something more secure, more unalterable, more worthy of our intellectual respect. We listen with profound approval when Mr. Emberton explains to us that every element in the immense new building which he has just designed is justified in reason.

Let instances be cited. The long horizontal slits of windows which in so many continental designs are the purest affectation, are here due to the fact that exhibition stalls are placed right up to the external walls, and, consequently, windows, if they are to be of practical use, need to start high up, and their vertical dimensions being thus truncated, they must be as wide as possible in order to serve their utilitarian purpose of providing the maximum of light. Modern concrete construction makes possible a very wide window with few supports to the upper soffit or transom; consequently, these horizontal windows may be almost continuous. In the uppermost story, which may be, and here is, top-lit, there is no need for the horizontal slits of windows, and so they are omitted. Inside the building near the entrance there is a small light well which reaches to the bottom floor, and this provides a justification for three tall, narrow, vertical windows in continuous rectangles, which pass across the floor levels at the centre of the façade. The escape staircases at the lateral extremities of the building provide another occasion for a different treatment of fenestration, so here we find the corner windows with which the works of M. Le Corbusier have made us so familiar. The long marquise which protects the entrances, of course, explains itself.

It sometimes occurs that the opinions of an architect about his own building do not exactly coincide with those of his more vociferous friends who acclaim its virtues in the Press. With regard to the new Olympia, we have been assured by these latter that it represents a very truthful expression of use and structure, and in so doing fulfils all the requirements of architecture. It need not be supposed that Mr. Emberton himself is ready to stand sponsor for this very stale Victorian fallacy. One of the distinctions of the design of the new Olympia is that it has an æsthetic quality over and above its utilitarian virtues.





CAMBRIDGE UNIVERSITY LIBRARY:
PHOTOGRAPHS OF THE NEW MODEL.

Sir Giles Gilbert Scott had caused some modifications to be embodied in the new model, prepared to illustrate his design of the library building, which was exhibited in the Senate House, Cambridge, last week for the purposes of general discussion. They include larger dimensions for the courts; and more windows. These photographs, showing the main front, the tower, and (on the facing page) the view from aloft, therefore give the scheme in its latest form.

NEWS & TOPICS



The keystone to the central window in Melbourne Place of the new Melbourne House (see pp. 199–201) is a sporting gesture to the occupants of Australia House, across the road.

THE PARLIAMENTARY PROGRAMME

BOTH Houses of Parliament reassembled, after the Christmas Recess, on Tuesday, January 21. The present Session is likely to be one of the longest and most critical of recent times. It began at the end of June last, and is not likely to end until late in July of this year. To the already overloaded Ministerial programme must now be added the certain prospect of a comprehensive measure dealing with slum clearance. That such a Bill will be introduced before many weeks have passed is evident from the replies to questions already put in the House of Commons. Indeed, it is known that the outlines of the Bill have now been almost agreed on. One of its main features is expected to be something in the nature of bigger grants to local authorities for slum clearance schemes, with greater elasticity in procedure.

★

It has long been realized that the problem of the slums is closely bound up with that of town-planning, and it is probable that the new Bill will deal with both these aspects of the matter. Rural housing, too, is likely to receive Ministerial attention. For some time past there has been considerable dissatisfaction among members of all parties at the slow progress made under the Rural Housing Act passed by the late Government, and efforts will be made to remove some known causes of delay.

★

But, in addition, there are several other Bills, of lesser importance, perhaps, from the national point of view, but of peculiar interest to readers of this JOURNAL, which will come under review during the coming months. There is the Architects' Registration Bill—now almost one of the "hardy annuals" at Westminster; the Bill for the Preservation of London Squares; and the London County Council Private Bill dealing with the Charing Cross Bridge scheme. Of these three measures, the second is assured of a comparatively smooth passage, although the vexed question of compensation may cause some trouble. The Architects' Registration Bill is not taken really seriously on this occasion. Unless its progress is attended by some entirely unexpected good fortune, its late introduction makes it extremely unlikely that it will ever reach the Committee stage this Session. As to the Charing Cross Bridge scheme, the acute controversy that has been raging between the experts will now be continued in Parliament.

THE BAD BRIDGE SCHEME

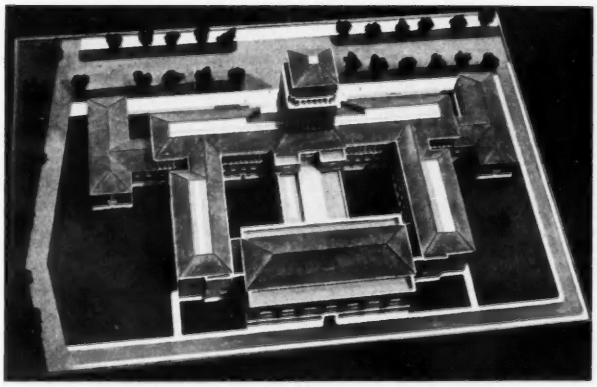
The Westminster City Council has joined the volume of protest against the L.C.C. Charing Cross Bridge scheme by adopting a recommendation to present a petition against the L.C.C. Bill. Westminster have a special grievance in not being consulted over the matter at any time in the course of the secret conferences out of which this bad bridge scheme was born; but apart from their just claim to a say in what so much affects them, they rightly ask where the southern river embankment is to come in the scheme, and also why it appears that this great approach to the centre of the capital is bent weakly in mid-flight because the Southern Railway want their station in a certain position. Altogether, the Westminster City Council's proposal is a formidable affair, and a very present help in this, our time of trouble.

SPORTING APPEAL IN A KEYSTONE

At Melbourne House, I am edified to observe that the keystones are not carved with representations of Father Thames, or Pallas Athenae, or figures symbolical of Agriculture or Algebra or Grief. Indeed the keystone to the central window opening in Melbourne Place, here reproduced, is not symbolical of anything at all. It is merely a sporting appeal to the occupants of Australia House, on the opposite side of the road, to remember that, whatever may eventually happen to The Ashes, during the year when Melbourne House was erected A. P. F. Chapman's team put up rather a good show in the Antipodes.

SOOT, SULPHUR AND STONE

The Report on Smoke Abatement issued by the Science Standing Committee of the R.I.B.A. produces striking evidence of the disintegrating effects occasioned by injurious chemicals carried in smoke and other fumes in the air of cities. The damage is due mainly to sulphur, but this, united with soot, increases the injurious effect by concentrating the acids and making the whole adhesive. It has been computed that a clean atmosphere would halve the expense of upkeep of public buildings and monuments, which amounts to millions of pounds when replacements and the short expectation of useful life are taken into consideration. It should be enough to know that 595 tons of soot are deposited yearly over every square mile of surface in the City of London.



A photograph of the model of Cambridge University Library, taken from above, to show the plan. (See also facing page.)



"What material is this?" It was taken from this photograph, by Paul Fripp, exhibited by the Royal Photographic Society, and here reproduced by his kind permission.

WELL-MANNERED ADVERTISEMENTS

The most interesting feature of the Oxford Conference on "the New English Countryside" was an appeal by Sir Lawrence Chubb to Oxford Colleges to do all they could to control advertisements. The colleges own many acres of land, and they could lay it down as a first principle that no land should be sold or let unless under a covenant binding the purchaser never to allow the land to be disfigured by ugly advertisements. This does not seem to ask too much of such cultured institutions.

★

Sir Lawrence also announced that it has been arranged between the Scapa Society and Sir Harold Bowden that all the Raleigh Cycle Company's thousands of road signs are to be altered from the present staring blue and yellow to a quiet green and black lettering, and that no new sign is to be erected until both site and sign have been submitted to the Society. This is a wise and public-spirited action which cannot help but bring in other great advertisers into the select body of well-mannered manufacturers.

MY SIXPENCE, I THINK!

The overwhelming majority in favour of regarding the mystery photograph of last week's JOURNAL as an example of old valley tiling that has sunk on its timbering nearly makes me think it was. But as you will see from the all-inclusive picture of brother turkey, of which last week's snippet was but a wing portion, Nature is up to tricks again; and my sixpence stays with me. Mr. Paul Fripp, who took this excellent photograph, thought tiles a very near guess; for, after all, he asks, what are feathers for but to throw off the rain?

LOCAL BANK NOTES

The Midland Bank has been holding an Exhibition of Historical Material recently in its magnificent new premises in Poultry. The story of a great bank is part of the social history of the country, and throws light upon that not merely from a financial, but from a very human aspect as well. This is especially so where a bank, like the Midland, has absorbed a great many smaller and private banks all over the country. Relics of these were among the most interesting exhibits. There were prints and engravings, deeds, ledgers, old drafts and notes, etc. There was a pair of pistols used in carrying money between York and Ripon. A picture of Leyland's Bank showed Mr. Leyland's Georgian mansion, with bank adjoining. A Coventry tombstone records the burial of "Little Lowke & Co." Bank notes were issued by the country banks, and were considered locally as more reliable than those of the Bank of England. They were printed from finely lettered copper plates, and bore in one corner a beautiful little engraving of some local building or scene. One of these, from Lincoln, is reproduced here.

ASTRAGAL



A beautiful engraving of Lincoln Cathedral embellishes this old country bank note, one of the exhibits in the Midland Bank's collection of historical material.

OLYMPIA 1929

Extensions to the Exhibition Halls

DESIGNED BY JOSEPH EMBERTON

Empire Hall, illustrated on this and the following five pages, is now approaching completion, and part of it will be used for the first time, conjointly with Olympia, to house the London section of the British Industries Fair, to be opened on February 17. It is the first multi-storied exhibition building to be erected in this country. The horizontal treatment of the façade provides permanent fixings for advertisements of the various exhibitions. At night the building is to be flood-lit from the marquise.



The main staircase, from the ground floor. The masses of black and cream Biancola are treated in a simple and logical manner, and the decoration, as in the remainder of the building, is bold and restrained. Handrails are of stainless steel.

OLYMPIA 1929

Extensions to the Exhibition Halls

DESIGNED BY JOSEPH EMBERTON

ON March 30, 1929, the leases expired of the four pairs of semi-detached houses which occupied the site on Hammersmith Road on the west of the dance hall, and which had been originally acquired by Olympia (1912), Ltd., for extensions. For some time considerable feeling had been apparent in London amongst exhibition promoters of the need of further accommodation for trade exhibitions. The existing halls at Olympia were much the best-equipped for the purpose, but they were almost entirely engaged for the whole year. It had also become obvious that the British Industries Fair would have to find a new home, as the White City provided very inadequate accommodation for the vastly-growing annual trade Fair. There existed in London no building other than the White City which could offer anything like the space required. For the last Fair the organizers let an area more than twice the available floor area in the existing Olympia buildings, and the demand for space showed a constant increase each year.

Olympia, however, was the most conveniently situated building which came within a reasonable distance of satisfying the requirements of the British Industries Fair, but the site on Hammersmith Road, available for development, represented only approximately a quarter of the size of the existing halls. Therefore, to solve the problem, it became essential that a multi-storied building should be developed. Hitherto no exhibition building has been allowed to be erected in this country over one story in height, with the exception that very subordinate galleries on an upper floor have been permitted in certain cases. The erection of a multi-storied building, therefore, necessitated compliance with the exacting requirements laid down by the London County Council Theatres Committee, with regard to the provision for the safety of the public in cases of fire or panic.

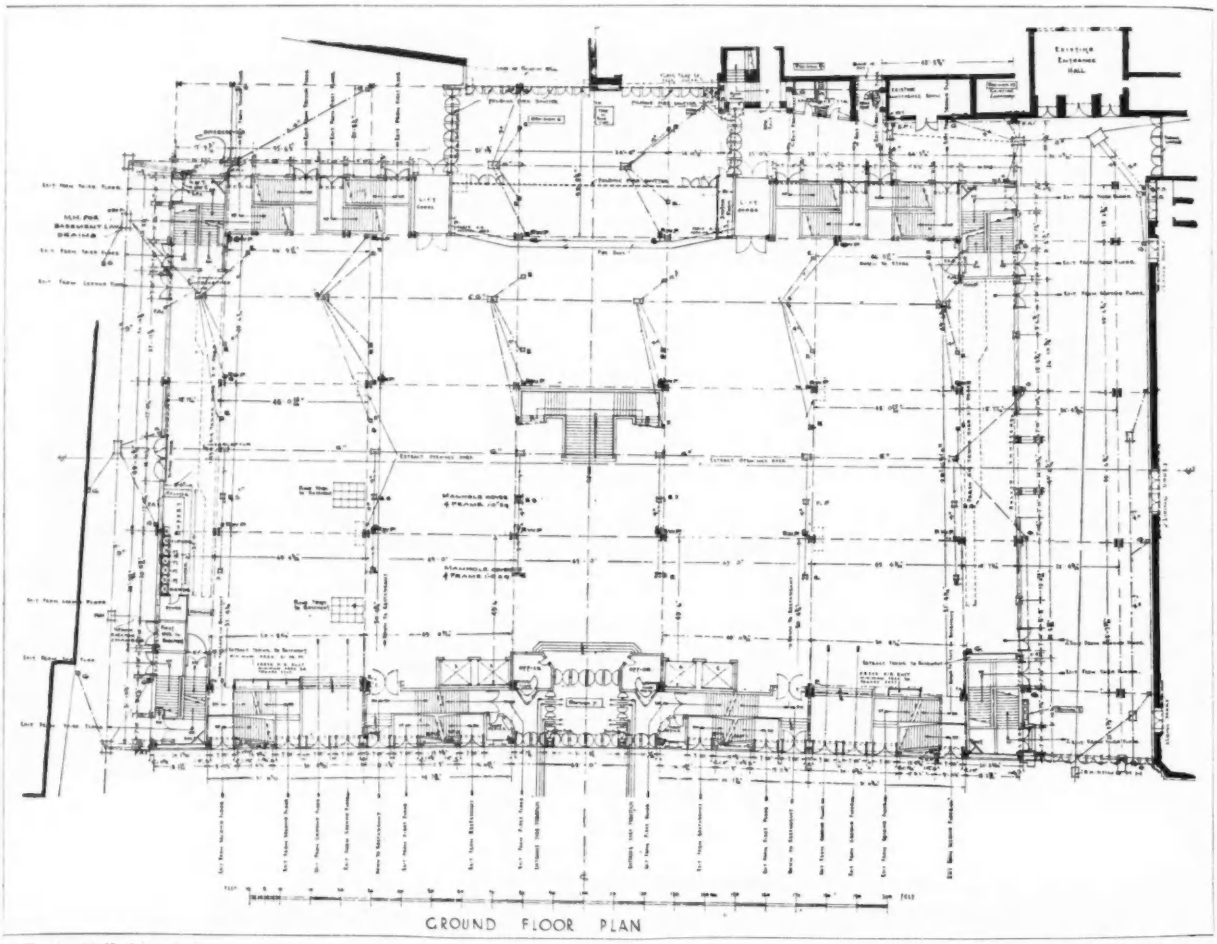
The arrangement of the staircases in the four corners of the building





Empire Hall, Olympia.] [*By Joseph Emberton.*

Two views of the main staircase, from upper floor levels. It faces a rectangular well, passing through the whole of the floors and placed with its long axis on the centre line of the main entrance. On entering the building the staircase and well immediately arrest attention. The well is designed to be hung with signs to give publicity to the various exhibits in the building, and to make the value of the sites of the exhibition stands on all floors as equal as possible.



Empire Hall, Olympia.] [*By Joseph Emberton.*

Ground-floor plan. Olympia already had two large halls for spectacular shows. The problem confronting the architect therefore was to provide on a limited site a maximum of unrestricted floor area for trade exhibitions, served by adequate arrangements for the safety of the public, and first-class inter-communication between its various floors and the existing halls.

determined the form of the elevation, for since exhibition stands of approximately 11 ft. high would be placed around the external walls within the building, light could only be introduced above this height and below the ceiling. This produces the rather unusual type of fenestration. The long low windows have been placed around the outside walls of the building wherever possible, and have only been omitted where interrupted by the staircase blocks.

This accounts for the first- and second-floor windows on the Hammersmith Road front not terminating the one under the other, for the former is interrupted by the staircase going to the second floor and the latter by the staircase going to the third floor.

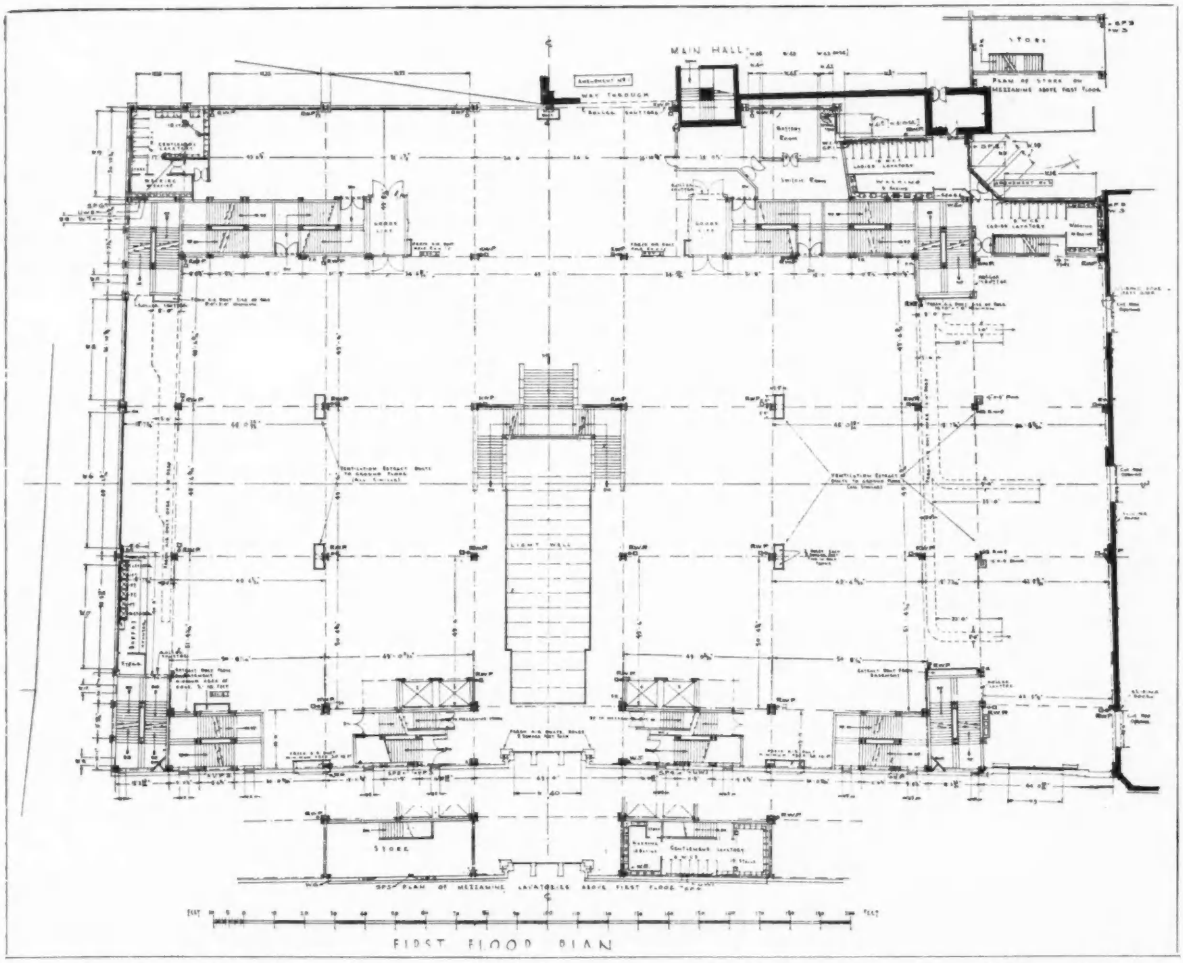
To introduce as much light as possible to the centre of the hall from these horizontal windows, a new type of prismatic glass has been used. This is a combination of lens and prism, and deflects the rays of light, which would otherwise strike the floor immediately under the windows, into the centre of the building. The building is a steel-framed structure, carrying considerable loads over maximum economical spans of 50 ft. The stanchions and beams in the external walls and staircases have been encased in concrete, but the main beams have been left uncased. Fire sprinklers are provided.



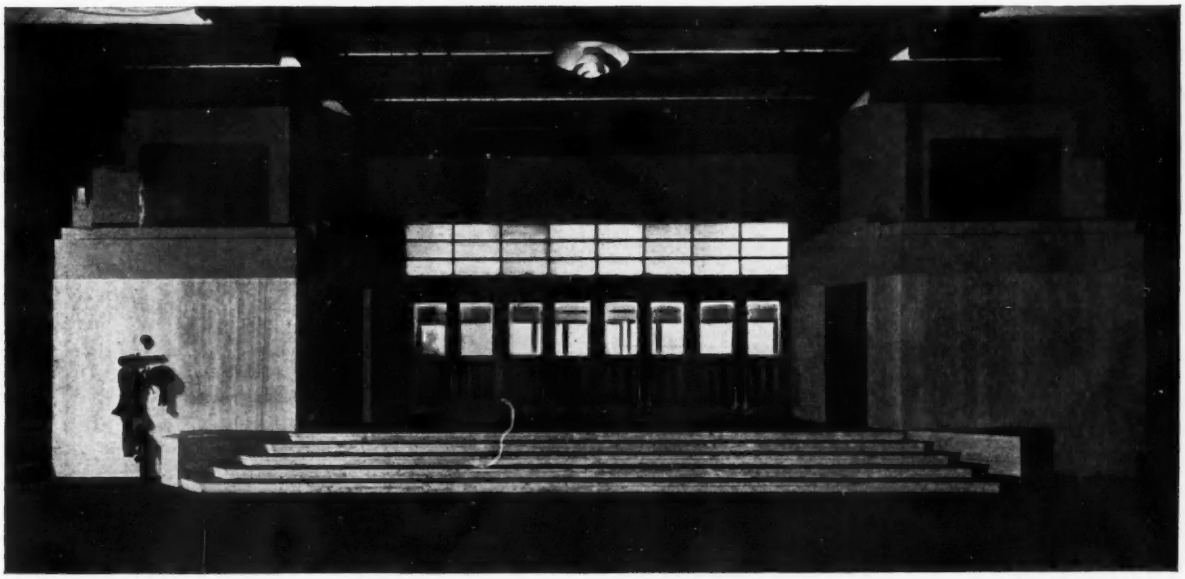
The gates of one of the two goods lifts. Each lift will take the largest motor-car, and can be converted to carry approximately sixty people.

The date fixed for the completion of that portion of the building required for the British Industries Fair was January 13, 1930. The work was begun on April 1, 1929. It was found that the steel would have to be erected at the rate of 500 tons per week if the contract was to be carried out in schedule time, whereas 100 tons is regarded as a very good week's work in the ordinary way. The work was ultimately completed to the hour. Four thousand drawings were prepared for the design and detailing of 7,400 tons of steel.

Adequate lavatory accommodation, equipped with eleven complete installations of gas-heated water supply apparatus, is provided.

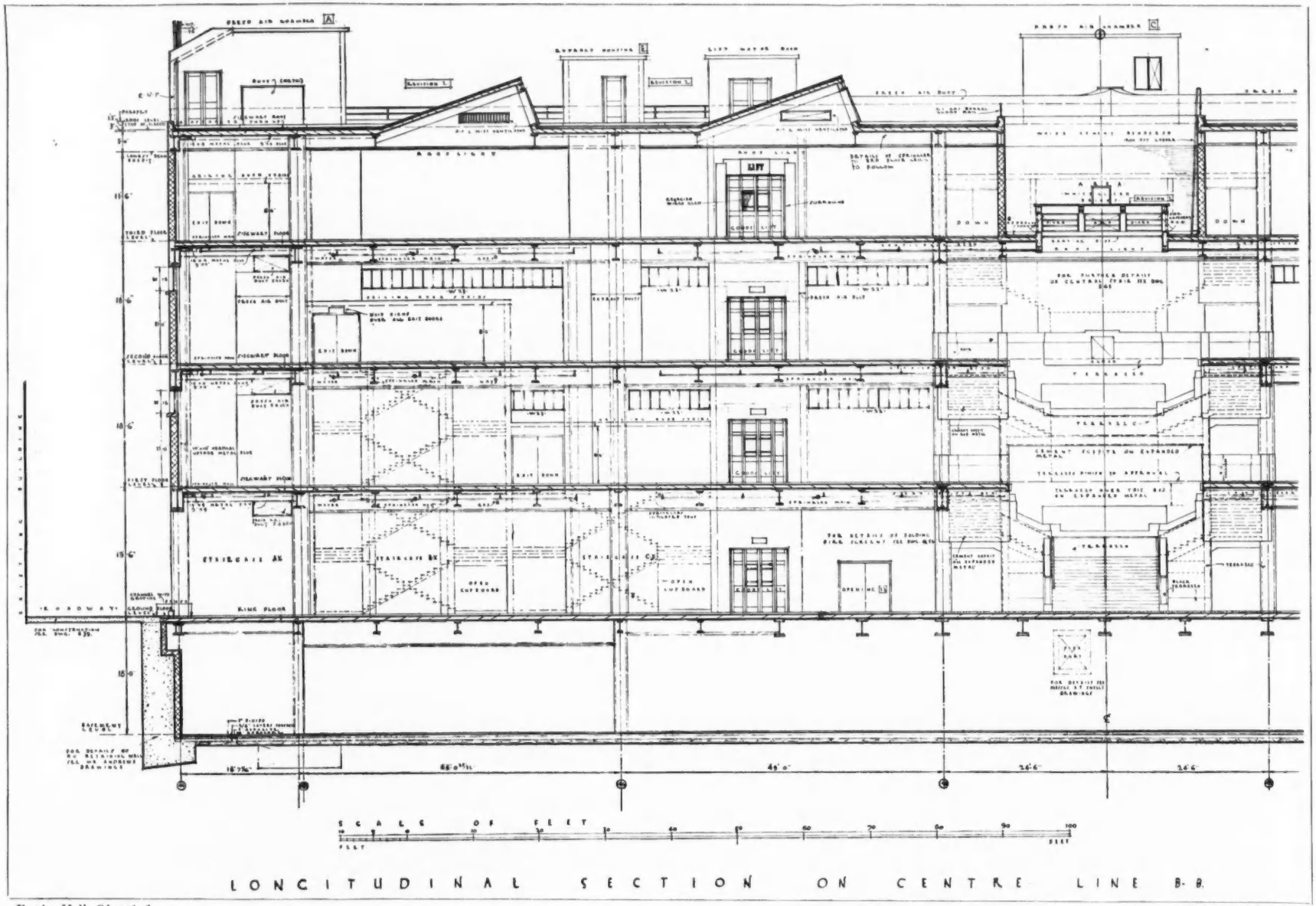


First-floor plan. Electric light and power, gas and drainage, are arranged with the maximum of accessibility, and can be connected to exhibition stands in any part of the building. Two passenger lifts are placed on either side of the main entrance (see ground-floor plan on facing page). Each accommodates thirty people and has a speed of 400 ft. per minute.



Empire Hall, Olympia.] *[By Joseph Emberton.*

The main entrance doors, looking from the interior of the exhibition hall. Immediately behind the camera are the rectangular light well and the main staircase. Beyond the doors is the vestibule, in which are turnstiles, leading from Hammersmith Road. To the left and right of the steps are offices, and immediately adjoining, the passenger lifts.



Empire Hall, Olympia.] [*By Joseph Emberton.*

Left-hand part of longitudinal section. It was necessary to provide for escape direct from each floor to the street, and eight fire-resisting staircases on each floor, apart from any staircases required for intercommunication purposes, were placed in what was obviously the most convenient position, namely, the four corners of the building (see plans on previous pages). In order to effect economy in floor space, two staircases, interlaced one within the other, were placed against each wall, otherwise the staircases on the ground floor would have occupied half the floor space.

KINGSWAY ARCHITECTURE: MELBOURNE HOUSE

FROM DESIGNS BY
TREHEARNE & NORMAN



A view, in detail, of the entrance doorway facing to Aldwych. The building is faced in Portland stone.

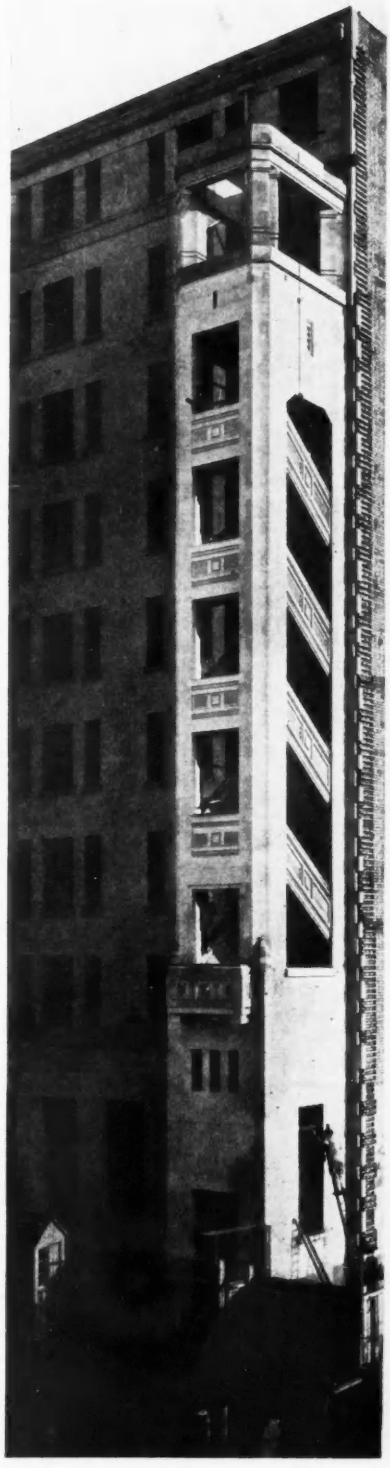
AS the actual existence of commercial buildings in London has now been recognized in the best artistic circles (writes a candid observer), it may safely be assumed that architects who specialize in the design of that particular class of structure need no longer fear that they are committing a grave breach of professional etiquette in mentioning the fact without blushing.

The evolution of the Kingsway type of commercial building has a very simple explanation. It registers the revolt of the modern man of business against the Victorian tradition that there's no place like home. Kingsway has advanced and prospered in spite of the criticisms of theorists and æsthetes, and the fact that a similar type of building has developed all over London indicates that people prefer to conduct their business under comfortable conditions rather than in catacombs, cells, dungeons or attics.

It has been stated that modern commercial buildings possess no individuality. Their elevations have been dismissed, rather curtly, as "slick tee-square stuff." Anonymous experts who tell the world about architecture in the popular newspapers have on occasion rallied to the attack with such vehemence that the accepted engineering calculations for counteracting wind pressure against buildings have, for the moment, seemed inadequate.



The main entrance hall, looking, through the archway, to the stairs and lifts. It is given symmetrical architectural treatment. On the left is an office direction board.



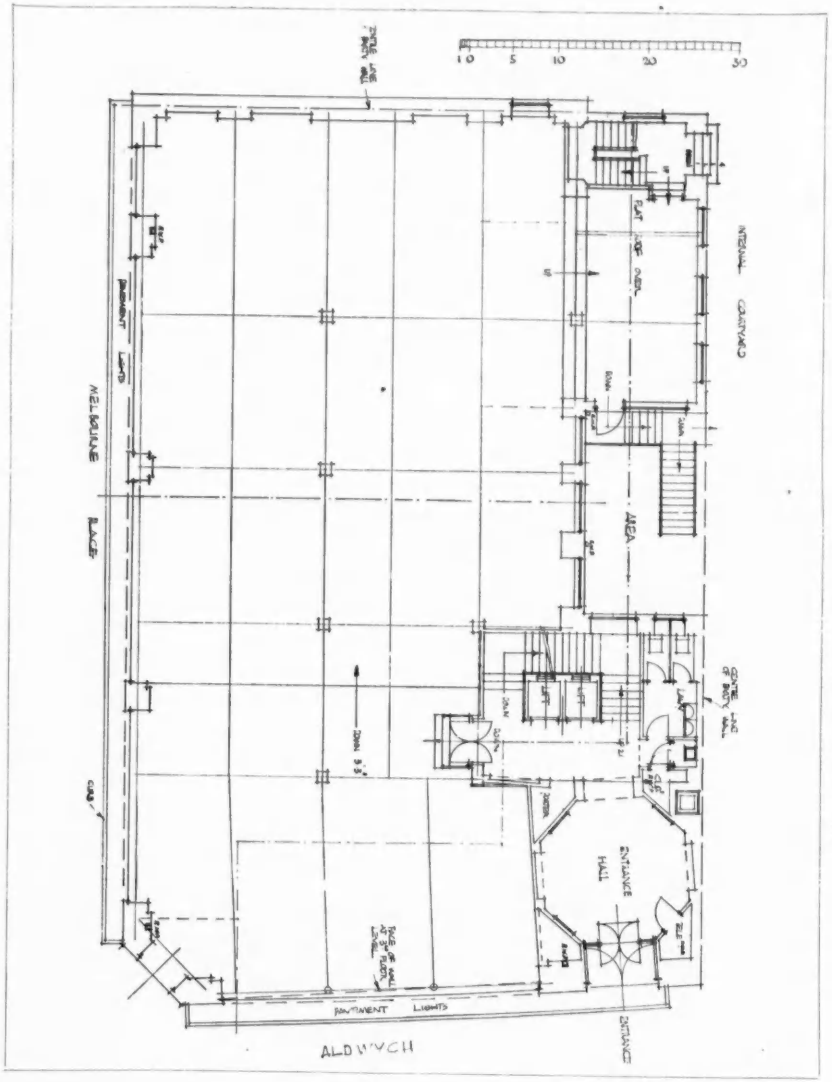
For the normal steel fire escape stairs this graceful and unique concrete structure is substituted.

effect economy in floor space, two staircases, interlaced one within the other, were placed against each wall, otherwise the staircases on the ground floor would have occupied half the floor space.



Melbourne House, Aldwych, W.C.]

This photograph indicates the frontages to Melbourne Place and to Aldwych, intersecting it, on the left, with, on the splayed corner, an entrance. The shop premises on the ground floor will be finished as they are let off to tenants.



[*By Trehearne and Norman.*

The architects' drawing of the plan, at ground-floor level. The building has been expressly designed on all floors to facilitate such subdivision as future tenants may require. Octagonal in shape, the entrance hall is distinctive.

The modern commercial building has been evolved on the assumption that people who spend a considerable portion of their lives in offices may reasonably be expected to demand cleanliness, daylight, air, a seasonable internal temperature, adequate and decent sanitary accommodation, efficient lifts, alternative means of escape from the premises in case of fire, artificial light and power, easily accessible public telephone and letter boxes, synchronized clocks, and facilities for the prompt preparation of cups of tea at about 4.0 p.m. daily.

In a very short time any office building that does not meet most of these requirements may quite conceivably possess individuality, but it will not possess tenants.

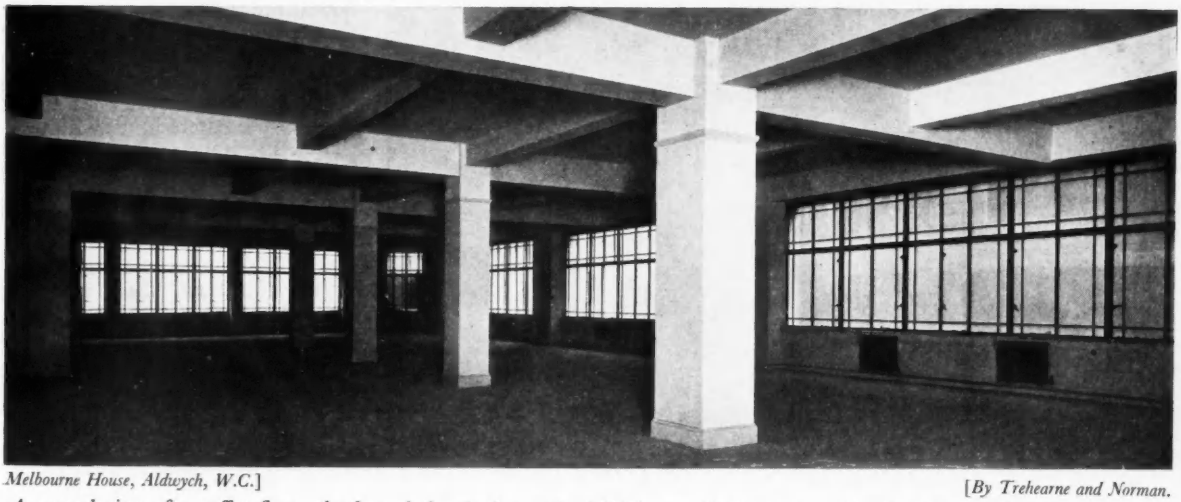
Melbourne House is erected to the maximum height at present permitted under the London Building Act 1894, and is faced with Portland stone on all elevations. Every window in the building can be opened and properly cleaned without endangering the lives of window cleaners. Surprisingly, the fire escape staircase to the internal courtyard has been designed and constructed in stone as an architectural adjunct, and is not a mere excrescence in cast iron of standard sections.

At Melbourne House, in defiance of the unwritten laws of the Classic tradition, the enrichment of the elevations is devoid of acanthus leaves and skulls of oxen and beads and reels.

Anybody who really does doubt whether the modern commercial building possesses individuality may here find that even a call bell-push in a passenger-lift enclosure can be distinctive, and that the possibilities of individuality of design are not exhausted even though the medium is just a panel of fire-resisting glazing in an office door.



That the opportunity for giving individual expression in design and decoration has not been killed by modern conditions, for those who can turn them to account, is shown in this approach to lift space, etc. The entrance hall is on the left.



Melbourne House, Aldwych, W.C.] [*By Trehearne and Norman.*

A general view of an office floor—the first—before letting and subdivision. Unlike some modern London buildings farther west, this one is particularly light: there are windows on three sides of the space here photographed.



The garden front of the Villa Lindenhof, taken from the shore of the lake—the Attersee.



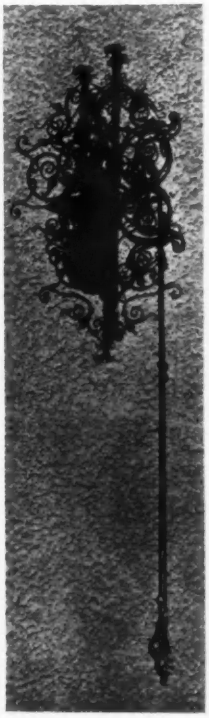
The self-contained servants' quarters, and the arch-pierced wall connecting with the villa.

THE ROMAN VILLA: AUSTRO-AMERICAN STYLE

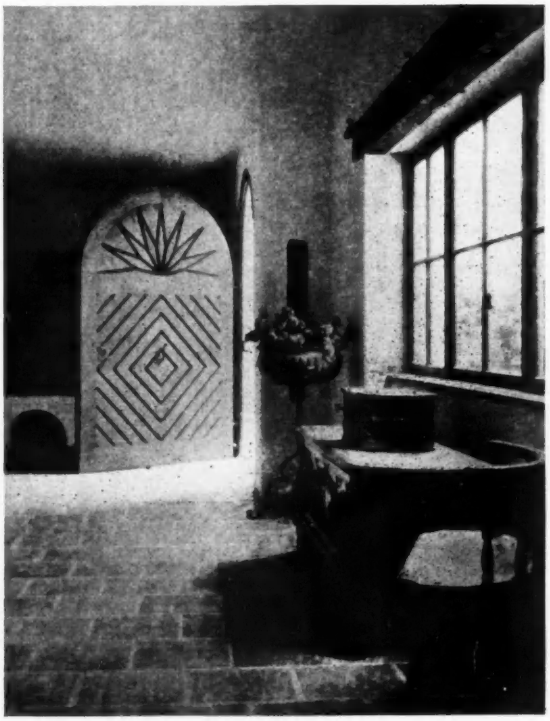
(*Architect: Dr. Karl Zwiauer*)

DESCRIBED BY JOHN GLOAG

ECONOMIC and social conditions in Austria today permit the building of great blocks of dwellings for the housing of what are usually termed "workers." Vienna is being girdled with these masses of flats. In the last two years fresh areas have been put under brick and concrete, and now, across the Danube, fronting the green levels that protect the city from inundation and afford a sun-bathing park for thousands of people, scaffolding still partially conceals what will be a mile-long cliff of gaunt buildings with streaming horizontal lines, designed to accord with the austere canons of the inhumanist school of architecture. However delightful such structures may appear to the disciples of Le Corbusier, their robot modernism is an offence in the proximity of a city still delightfully dominated by the gracious manners of the baroque architects.



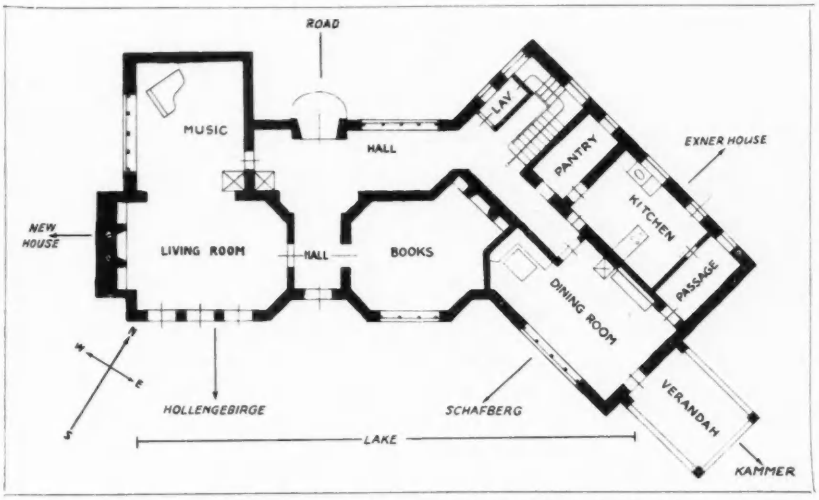
Quasi-baroque iron bell-pull, wrought by the local smith.



Interior of the entrance-hall, with the front door open, to show the effect of its simple design. To the left is a glimpse of a tiled stove.

There is so little building being done in Austria, apart from these socialistic shockers, that private domestic architecture acquires exceptional interest because of its rarity; and that interest is intensified when such work represents intelligent modernism and is unmarked by an anxious concern for novelty. There is something soothing and sane about the deliberate rejection of all things, new or old, that happen to be insipid or ugly, and a house expressive of such sanity has just been completed for an American owner on the north shore of the Attersee, near Litzlberg.

The Americans are acquiring a taste for villas in Europe. Generally they like them flavoured with age, accepting quite often with remarkable enthusiasm houses that are mere decrepit shells, into which these new Romans fit their ornate plumbing, their refrigerators, heating systems, and all the mechanism of one-hundred-per-cent. U.S.A. comfort. They seldom build from the beginning, for they are still inclined to regard Europe as "the land of Readymade," inhabited (to borrow another of Kingsley's labels) by the race of "Doasyoulikes." Incidentally, flapdoodle, which grew wild in that pleasant land described in "Water-Babies," is carefully cultivated all over



The architect's ground-floor plan of the Villa Lindenhof, indicating the manner in which the aspects of the principal rooms have been made to command views over the lake and countryside.

the Continent for the consumption of Americans by people who have houses to let or to sell. But to build in a country as lovely as Austria is a tempting experiment, and this particular house by the Attersee is the pleasant result of yielding to such temptation.

The site was acquired for the beauty of its surroundings. Behind it is the gentle shoulder of a hill topped with pine woods; and east, south and west is the turquoise lake, walled with wooded hills and backed with blue mountains: every prospect pleases, and only a little of the local building is vile. Fortunately, an abundance of trees buries the bungaloids that small purses and even smaller minds have propagated.

The Austrian architect of the house was receptive of the idea of complete collaboration with his client, and the plan was made on the site where the shape and aspect of each room could be discussed. Essentially it is a house planned from the inside. Its rooms enjoy an easy spaciousness, derived partly from large windows each placed for the view it commands, and partly from the client's objection to box-shaped rooms, which led to the making of many alcoves and comfortable recesses.

The ground floor accommodates on the western side a large L-shaped music-room, with a south wall composed of french windows. This room had to be insulated so that sound could not carry from it. A tiled hall separates it from other rooms, and this hall extends the full width of the house and branches away towards the curving staircase. Kitchen and dining-room are at the eastern end, and the dining-room opens out upon a loggia whose arches make cool frames for the vivid hues of the lake and its background of mountains. Between the dining-room and the hall, and facing south, is the long library, with a big recessed fireplace and a dado of bookshelves. On the north side there is a courtyard, with a garage and servants' quarters, linked to the house with a wall pierced by a graceful archway through which runs the drive.

The first floor has bedrooms which all contrive to command views of the lake, two of the eastern bedrooms sharing a balcony that is the roof of the loggia. There is a third floor of bedrooms, formed in the roof, with big dormers that admit a lot of light.

Below the ground floor is a group of cellars, approached by a stairway that is carried beneath the tall staircase window. Here the still-room, store-room, wine cellar, laundry and the electric water-heater are accommodated.

The plans were settled, and they achieved all they were intended to achieve, producing finally a shape like an L, with the small member forming an obtuse instead of a right angle with the long member. It was then that the client began to be curious about the appearance of the house, and the question, "What is it all going to look like?" was answered by the making of a paper model from the scale plans. Not until then had the æsthetic significance of elevations been considered. This does not imply a casual disregard of the matter; but the function of each room, the relations of the different rooms to each other, and the making of the cool tunnels that were to connect those rooms—namely, the curving hall on the ground floor and the corridor that corresponded to it on the floor above—had absorbed the entire attention of the designers of the house.

A steady concern for the individual fitness of each room and the skilful association of such individual claims in the plan does not have an adverse effect upon the exterior. This house shares with the smaller houses of Stuart and Georgian England the look of comfortable invitation, the enduringly hospitable air that is the special and splendid quality of English domestic architecture. The creation of such a benign atmosphere is beyond the power of the inhumanist school; but in this



On the first floor, at the top of the main staircase, the intersections of the vaulted ceilings introduce interesting features into the design.

house it has been attained without any conscious striving.

With the exception of a few minor alterations the paper model was followed when the house was built. The walls are of hollow bricks coated with chalk plaster (*thränenputz*), giving a rough texture and a dazzlingly white surface. The roof, with its huge overhanging eaves, is covered with red tiles (made locally at Linz), and each tile has a pierced nose on the under side through which zinc wire is passed and anchored to nails in the rafters. Cement of gravel, chalk and cowhair is used for binding the overlapping joints of the tiles on the underside.

The ceilings throughout are of reinforced concrete, made in one piece. The floors in the principal rooms have larch frames and pine boards, finished with a solution of wax in benzine. This finish is also adopted for the window frames and sills, which are of oak, except in the dormers, where fir is used. The windows have external sills of zinc. Most of the doors are of rough-sawn pine, burnt with a benzine torch and scrubbed with a hard brush, so that the charred grain stands out and presents a much harder surface than pine merely stained and polished could afford. This burnt, brushed surface is then treated with the wax and benzine solution. The doors of the music-room and library are of oak. There is no paintwork at all.

The interior decoration is simple. The rough-cast plaster walls are in a low tone of cream; all the woodwork is waxed; colour comes from textiles, and in daytime from the intense tones of the lake, woods and mountains, of which each window makes a moving picture.

The metalwork fittings for doors, and such things as window guards, light brackets, bell brackets and balustrading, are sturdy pieces of smith's work, most of it being based on traditional patterns and hand-made, locally. Everywhere iron is used. In most Austrian villages there is a capable smith who works quite unconsciously in a traditional fashion; even the iron brackets and bandings on farm carts and hand barrows represent shapely memories of baroque design.

In the hall and in the long, wide corridor on the first floor are wall fountains sunk in circular-headed niches made of Untersberg red marble, with water issuing from lion masks. This is typical local marble work, to be found in nearly every *gasthaus* in that part of the country.

The house is furnished with Italian, French and Austrian country-made things in oak and walnut, chiefly of eighteenth- and early nineteenth-century origin, although there are some much earlier pieces. The simplicity of the decoration and the restraint of the furnishing enable the shape and agreeable proportions of each room to be fully appreciated. Everywhere a mellow understanding of form and colour is apparent. As an æsthetic collaboration between the ideas of that ancient home of good taste, Austria, and those belonging to that land of eager experiment, America, it has attained a character that makes the best of both interesting worlds—the old and the new.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

On the day on which Parliament reassembled Sir Kingsley Wood asked the Prime Minister if he could make a statement as to the Government's proposals on slum clearance.

Mr. MacDonald replied that it was hoped that a Slum Clearance Bill would be introduced at an early date.

Two days later Major Nathan asked the Minister of Health when he anticipated that the Government's projected Bill as to slums would be passed into law; and whether meanwhile he was refusing to consider and approve housing schemes submitted by local authorities.

Mr. Greenwood said he could not add anything to the statement made by the Prime Minister on the subject of the first part of the question. As regarded the second part, no schemes for providing new houses were being delayed in his department by the expectation of the new Bill; but in the case of slum clearance schemes he had n some instances suggested that in view of certain difficulties which had arisen it would be better to await the proposals which he hoped shortly to submit to the House.

Major Nathan asked if the Minister could give any indication of the delay that would be involved, in view of the hardship that would be incurred by the working-class population.

Mr. Greenwood: It is very difficult to calculate that. In so far as there are any delays in slum clearance schemes now, they have arisen out of decisions of the Court which must be put right by Parliament.

Sir K. Wood: Is not the present position this, that slum clearance schemes have been stopped and housing progress decreased during the last few months?

Major Nathan asked if the Minister would consider the introduction of declaratory legislation to overcome, in a very short space of time, the difficulties to which he had referred.

Mr. Greenwood: It is much more preferable to deal with the matter in a general Bill.

Mr. Snowden informed Sir A. Sinclair that the present intention was that the proposed slum clearance legislation affecting England and Scotland should, if possible, be dealt with in the same Bill.

Mr. Simon asked the Minister of Health if he would state the average cost of non-parlour houses completed during each quarter year since the beginning of 1924.

Mr. Greenwood said that particulars as to the average cost of houses completed during the periods mentioned were not available, but the following statement showed the average price of non-parlour houses included in contracts let by, or in direct labour schemes of, local authorities in England and Wales during each of the quarter-years in question.

	Quarter ended			
	March.	June.	Sept.	Dec.
Year	£	£	£	£
1924 ..	398	413	424	441
1925 ..	438	439	443	444
1926 ..	442	435	443	448
1927 ..	425	412	403	407
1928 ..	368	356	360	354
1929 ..	339	349	343	349

Sir A. Sinclair asked the First Commissioner of Works whether, in view of the opposition, not only in Edinburgh but throughout Scotland, to his proposal that only one design for the buildings on the Calton Jail site—that of the chief architect of his department—should be submitted to the Scottish Fine Art Commission, he would consent either to hold an open competition or himself to appoint an architect, after consulting the Commission, the Edinburgh Corporation, and representative bodies interested in the architecture and amenities of the city.

Mr. Lansbury replied that the decision to entrust the design of the buildings on the Calton Jail site, Edinburgh, to the chief architect of his department was taken nearly two years ago, and he was not prepared, at this late stage, to reverse that decision, either in favour of an open competition or an independent architect. The policy of selecting an architect for important national buildings by open competition had been adopted only in four cases during the last 150 years. In only one instance had the successful design been carried into execution. The appointment of an independent architect would not appear to meet the objection to the consideration of only one design to which Sir A. Sinclair referred.

ARCHITECTS' ADVISORY PANELS

The Urgent Need for Extended Publicity

BY E. MAXWELL FRY

Some time ago systematic inquiries were originated by THE ARCHITECTS' JOURNAL *as to the working of the panels of architects, originally called into existence two years ago, to give advice to landowners about the reconditioning of cottages, and later charged with extended activities. A great number of replies to our questionnaire was received from all over the country, and the overwhelming majority disclosed a disappointing state of affairs. "We have no report on the work of the panels for the very simple reason that we have had no work to do." So ran one answer; and too many others were like unto it, though there were gratifying exceptions.*

For the benefit of our readers, the whole of the letters we have received have been digested, and the position has been reviewed by our special commissioner, in the light of last week's meeting, where it was the subject of discussion.

DURING the last few years, extraordinary efforts have been made by various organizations to combat the spread of bad building and the general spoliation of the country. The methods employed have varied: some aiming at the widest forms of publicity, others making use of quieter channels. By one means or another the public has become faintly cognizant of the baser forms of the evil, and is possessed in part with the seeds of a desire to reform its ways, and to do what it may be taught is the right thing to do.

It is recognized that the battle-front of those who wage war against ugliness is widespread. Dealing with so strong and so mobile a force as ugliness, there is need for the exercise of the full art of war: for strategy and tactics; heavy artillery and sniping. In the end, the continuous battery of publicity, delivered through every opening which the public Press may offer, will break down the resistance of ignorance, but in the meantime there is a deal of work to be done under cover of this barrage.

In a quiet sector of the line, a desultory action is being maintained by a body which we shall call the Advisory Panels. Little enough is known of them by the general public, and not very much by the intelligent professional public, yet for two years they have tried to maintain a difficult position with but little support, and if they have met with but scant success it is not to be wondered at.

In the first place, they were called into existence to give assistance to owners and others in the reconditioning of old cottages, under the Rural Workers Housing Act of 1928. Their scope was therefore limited in its intent, and narrowed, further, by the relative unpopularity of the Act with which they were yoked. For the greater part they remained dormant, and hardly rose to the point of failing. In one or two districts, however, where active and enthusiastic men have had power to invoke the workings of the Act and zeal enough to carry others with them, many old cottages have been reconditioned, and a deal of other useful work put in hand. In successful practice the panels have found it possible to widen the scope of their assistance to include building generally, and even the wider interpretation of the word "amenity." This is the system at its best. Generally it has done little or nothing.

Returning to the working of the scheme: it was intended that the panels should be composed of architects, landowners, builders, and a member of the local council; and that they should be called in by the council to give advice on matters pertaining to the Act in question, so that the delicate job of making old work serve new generations might not suffer through lack of knowledge or artistic perception. The reconditioning of a cottage was not to cost more than £100, so that there was no question of remuneration for the professional services of architects.

Established to give assistance to owners in the working of the Rural Workers Housing Act of 1928, they found themselves, yoked with a not very popular measure, being led into a hard world that was ignorant of their purpose in life, and sceptical of the power of the particular Act to do what was intended of it. Whatever success these panels could hope to come by lay, therefore, in the individual efforts of their members to convince owners, builders and local authorities that their services could be of value.

The existence of the panels was brought to the notice of local authorities by pamphlets issued on one or two occasions, and these pamphlets actually tended to widen the range of subjects upon which the panels might be consulted: this, as the result of a decision to make them more generally useful.

Such was the extent of the introduction which prepared the way. It was not much, and, as may be well imagined, few elected members saw fit to engage in a battle for the right where everything depended upon their own courage and wit. It was left to those who had much public spirit, time, energy, and sometimes opportunity, to force their way into the surveyors' offices and the council rooms in search of work to do. The rank and file did not make the attempt.

That those who got busy found work to do only proves what heavy tasks may be undertaken by a spirited minority. It would be unfair to say that the panels have been entirely ineffective. Where they set about their job in good spirit, which is to say, where there has been one man to give direction and impetus to their movements, much has been done. In Devon, a purely rural county, the reconditioning of cottages has been carried out on a large scale. Here, be it noted, a small fee paid to the local surveyor for each successfully completed job has made the way easier.

Again in Hampshire, where the energetic County Architect has realized what valuable help lay waiting to be used, the scope of the panels' consultative work has been made to include even a re-designed village hall. In Oxford and Cambridge, both districts that can produce a certain body of cultured support, there is a similar story of good work performed.

But what is the true position over the

length and breadth of the country? It has been found that, generally speaking, the panels, having been nominated and convened, sat wondering what deeds they were to be called upon to do; and, having pondered the subject for a while, went about their jobs and let the matter drop.

The local authorities, on their part, carefully filed away one or two little pamphlets relating to Architects' Advisory Panels and Rural Housing, and went about *their* job, which, as we all know, consisted of giving assent to the erection of all sorts of buildings that passed the by-laws but contravened every ordinary law of decency.

This was the position last week, when at a conference of members of the panels, held on the R.I.B.A. premises, Mr. Greenwood, the Minister of Health, gave his blessing, his promises of help, and his very sound advice. If the system is to be made a success, and it will be generally agreed that such advice as architects may give to small builders and others outside the architectural strata is well worth the giving, then the members of panels who are asked to spread the gospel in difficult country should be given more than the assistance of a Parliamentary legal machine and a few pamphlets. The world is not full of enthusiasts, and the devil of ugliness works constantly, blithely and well.

"To-day," said Mr. Greenwood, "you must tell the world everything. Publicity is an important factor in success, and knowledge must be spread by publicity." It is unfortunate that we live in a world where mass opinions are reflected by newspapers, wireless and advertisements. But it is true. And the inverse is also true; for just as we have to suffer the affliction of man's sentimentality delivered through the mighty organs of publicity, so also we may deliver counterblasts through the same loud speaker. And through lesser trumpets.

Printing exists to propagate ideas, and the printed word is a wonderful messenger to send before one. A manufacturer wishing to place a new invention—let us say, a vacuum-cleaner—upon the market, pays money to an advertising firm to compile a whole chain of advertisements, pamphlets and well-designed brochures. These are most carefully arranged to follow one another, so that an introduction is made, maintained, strengthened, embellished, and so finally cemented in bonds of interest that when ultimately the well-groomed young man calls at the door he literally plucks the orders like ripe figs from the tree.

No true comparison is possible between the profits of such a campaign and that which the panels must pursue. Yet there is a great difference also between the cost of an advertising campaign and that of a series of simple pamphlets setting down the points which we know so well will make the difference between good building and bad. It is wrong to expect that very many architects will go about this work without some such encouragement, or that one can widely enlist the services of laymen without some definite basis of policy.

The work of the panels, once started and firmly established in several districts, must be envisaged as something that will grow and become important and necessary. It is started by architects, but it should, I think, become less the work of architects, as soon as the best type of public person is encouraged by the propaganda, by the well-defined policy and by the constant backing of the C.P.R.E., to take over the management of the panels. The architect should be left as consultant to the panel instead of direct consultant to the local authority. It is suggested that the convener of the panel should be a layman, and this is indeed the direction in which the system should move.

There is a great deal of work for the panels to do, even when their work is limited, as the work of such an organization should be limited, to rural areas. The county council has become a new authority in the land, and it is here perhaps that one may find a likely and an economical channel through which to approach the lesser authorities. Ultimately, it is to the surveyors that the panels must address themselves. The local surveyor is the executive official of the council. He it is who goes through the plans submitted for consideration, makes notes and forms decisions. When the plans reach the council they are often as good as passed, because the surveyor is a trusted official whose advice is commonly taken. He is also most commonly a reasonable person, Mr. Spinlove's experiences notwithstanding, and sufficiently alive to the trend of public opinion to accept advice when it is well intended and properly understood, especially when the need for it is reinforced with all the help which can be given by such influential bodies as the C.P.R.E., the R.I.B.A., and by the Minister of Health himself. The surveyor is a very important link in the chain.

On the other hand, it is to architects that the sponsors of the scheme must address *themselves*. For, as it has been seen, the country is by no means covered by active panels, and many of the districts already covered are much too large to be dealt with by a handful of men operating from an urban centre. Most architects are fairly busy people; not entirely apathetic, but disinclined to thrust themselves forward into affairs which they half-understand. There is, too, a certain fear that the work involved might arouse suspicions in their fellows and neighbours of interests not entirely altruistic. The position must be made clear therefore, that architects are very much needed to give direction to the work of the panels, and to set and keep them on the path of greatest usefulness; and that the panels will become an important factor in so raising the standard of building that architecture will rather come into its own again, than architects be defrauded of their bread and butter by voluntary workers.

This brings us back to the organization of the scheme and to its organizers. It seems a great pity that a scheme from which so much has been hoped should have been allowed to be successful in only a few localities over a period of two years. Two bodies, the C.P.R.E. and the R.I.B.A., together set the machinery in motion and gave it its preliminary impetus. The R.I.B.A. apparently provided the architects and the C.P.R.E. the machinery, initiative and spirit. Looking at the results, one may venture to suppose that the R.I.B.A. was the sleeping partner. And when one knows that the secretaries of many panels took no action over the whole period, and were half-ignorant of what was expected of them, one cannot think that the other partner was too fully alive. Nor is there question of disparagement in the suggestion that when an attempt to make use of the services of architects in this useful capacity is once entered upon, every form of weakness places the profession in an invidious position and lowers the value of work performed by architects in their ordinary professional capacity. The C.P.R.E. is looking after a number of things, and its funds are limited, but it must surely be in the position to circularize its own members and provide them with knowledge of what the panels can do, and it is hard to believe that money cannot be found to impel a wider dissemination of the policy upon which rests the work of the panels.

As the Minister of Health stated in his address to the Conference, we are much too inclined to hide our light under a bushel.

The work which the panels can perform can be made one of the really effective means of moulding an educated opinion among those who are able to be responsible for the best amenities of the countryside, but in order to gather this body of opinion, much more active, more scientific and more public steps must be taken, first by the organizers, and in the course of time by the members of the panels themselves.



ENGLISH PRECEDENT No. 100

ROYAL CRESCENT, BATH

The successful development of the centre of Bath led inevitably to extensions in the direction of the steep hills which surround the town.

This crescent was the first of a series of hillside terraces rising one above another. It was begun in 1676 by the younger Wood, and is built in the form of a great half-ellipse, using the superimposed order with fine dignity.

The first view of the great mass, swinging round the compass of a whole little valley, is an architectural experience of the first order. —[E. MAXWELL FRY.]

JAGO *v.* SWILLERTON AND TOOMER

In the matter of the Arbitration Act, 1889

BY KARSHISH

This is an action before an arbitrator, brought by Colonel Jago, J.P., jointly and severally against builder and architect for damages for collapse of a village hall. Mr. Chawlegger, K.C., and a Junior represent the plaintiff; Mr. Twistle, the defendant Swillerton, and Mr. Pitfall, K.C.—with him Mr. Wrackem—the defendant Toomer. Defendants have opened their case on the second day of hearing, and Mr. Pitfall intimated, just before the adjournment for luncheon, that his next two witnesses would give important evidence.

iv: The Defendants Close

WHEN, at two o'clock, the arbitrator took his seat at the head of the reference table, Mr. Twistle at once called JOHN ROBERT SWILLERTON, who said he was an experienced builder and carting contractor. His firm had held a good reputation in Nollingborough for more than fifty years. His father had put him to the joinery, and he was a joiner by trade and thought he understood as much about wood, both as a buyer and practical man, as anyone in the country. He looked after all his own work and spent most of his time going round his various jobs. He had often used American maple before, and never had any trouble with it. He had heard Mr. Toomer give evidence of the curling up of the boards laid on concrete, but if that had been his (witness's) job it would not have happened, for he would have well tarred the concrete before he laid the boards. He had used maple under the direction of another architect to floor a skating-rink, and it was a first-class job. In that case the architect ordered the maple to be nailed down on a floor of deal boards, and, in his opinion, that was the proper way to lay such a floor. No architect had ever before directed him to lay a maple floor on joists same as Mr. Toomer ordered at Grastopen Hall. He had carried out Mr. Toomer's instructions to the letter. He generally used blocks and wedges to bring flooring up close and true, and didn't hold with anyone who objected, as he had worked that way all his life and had no call to regret it. He might sometimes have used the blocks and wedges for fixings, but that was not his general way, and he didn't see how it could be done as a regular thing. The blocks and wedges were often knocked out, as they came in the way of the skirting grounds. He did not know any other reason for knocking them out. He had never known a floor behave as this one, nor heard of the like; but the buckling of the floor was a small matter to put right. He would not have gone for to knock out the wedges; his way would be to cut a board or two out near about the middle of the floor and let her settle back and knock the wedges out after, and then fit new boards in where the old had come out. He reckoned it a one-day's job for four men and it would have cost him, maybe, £3 10s. It was the jumping about and larking on the buckled floor that did the harm, and that was no affair of his. It was a wicked thing to misuse a building that style, and them as was responsible had ought to pay for it.

Witness, cross-examined by Mr. Chawlegger, agreed that he was responsible for building according to the true intent and meaning of the drawings, specification and instructions prepared and given by the architect, and, in addition, for doing all that was necessary to complete the building in a sound and workmanlike manner, although every detail of the work might not be specifically described, drawn, or ordered. He also agreed that dancing was an ordinary and proper use for a village hall. When asked whether he considered he had constructed the hall in a sound and workmanlike way for the purpose of dancing, witness said he "didn't see there was much to complain about."

Cross-examined by Mr. Pitfall, witness was asked :

Were the blocks and wedges shown on drawings, or described in specification or otherwise, ordered by the architect ?—No.

Were they a part of the necessary permanent structure of the building ?—No. They were not.

They were, then, put in by you for your temporary convenience in carrying out the work: they were what engineers call "false work"?—It is no call of mine what engineers say. Blocks and wedges is good enough for me, and that's what they are.

They were in the nature of tools ?—Well, that's a nice thing to say to a builder.

Arbitrator : Answer the question.

Witness : No, of course they were not tools.

Counsel : I said in the *nature* of tools. If they had been of iron specially made for the purpose, would they not have been taken out ?—I never heard tell of such a thing. Just any bits of wood will serve.

Bits of wood which are not worth the trouble of taking out, you mean ?—No, they are not.

Did you order them to be taken out ?—No. I had no call to.

If you had thought the floor would swell and set up a condition likely to cause buckling, you would have had the wedges knocked out ?—Well, I wouldn't go looking for trouble, would I ?

And yet you told your Counsel just now that you knew as much about the characteristics of different woods as anyone in the country ?—Well, and I say so. There never was a floor that carried on like this one at Grastopen.

Re-examined by Mr. Twistle, witness agreed that as a builder, and under the terms of his contract, he accepted no responsibility for what was altogether unprecedented and beyond experience. He had exactly carried out the architect's instructions in accordance with the established principles of sound building, which was all the architect could require of him; and if the architect wanted something different it was his duty to say so. He looked to the drawings and specification to direct him in all matters not according to established custom; and an architect prepared those documents on that understanding. Where different instructions were not given, it was always understood that established custom was intended. If an architect specified a material which had special characteristics known to him by his own particular experience, it was his duty to warn the builder.

Mr. Pitfall then called Mr. ARIC BUCKSTEAD RANDEGGER, A.M.I.C.E., Lecturer on Statics and Dynamics at Gallow's College.[1]

Examined by Mr. Pitfall, witness gave

[1] The author is indebted to Mr. A. S. E. Ackermann, B.SC. (Engineering), F.C.G.I., A.M.I.C.E., well known as an expert witness in the Courts, for the elucidation of the problem presented by this witness.

particulars of his credentials and qualifications, and stated that he had heard the evidence of Mr. Spoontide and had examined the diagrams and calculations put in by that witness.

Counsel: Do you, Mr. Randegger, agree with Mr. Spoontide's evidence?—Only in parts.

In what particulars do you differ?—In most particulars except his general conclusion regarding the so-called "springiness" of the floor. I agree that the whole building—weight of walls, floor and roof, and the elasticity of the roof-bracing—was, at the moment before the collapse, all involved in the springy action of the floor.

Area of dancing floor: 46′ × 26′ 6″ = 1,219 *sq. ft.*

Maximum load on strip 12″ *wide*—24 *dancers* × 140 *lb.* = 2,360 *lb.* = 590 *lb. central load on half floor.*

Crown of buckled floor: 6″ *above normal.*

$$\text{Horizontal thrust at } x = \frac{13{\cdot}25 \times 590}{0{\cdot}5 \times 2240}$$

= 7 *tons (nearly) per ft. run of wall.*

Total thrust on each wall = 320 *tons.*

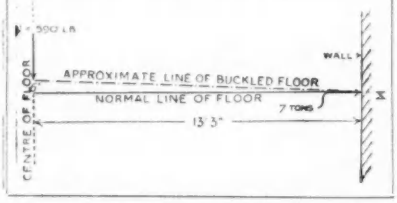


Figure three. Diagram, given in evidence by Mr. Ronald Spoontide, F.S.I., showing computation of horizontal thrust of buckled floor.

Counsel: I hand you the diagram (figure three) prepared by Mr. Spoontide to support his evidence that a force of seven tons represents the outward horizontal thrust, on each foot run of each side wall, produced by the weight of the dancers. Do you accept the diagram and the figures?

Witness: I neither accept the figures Mr. Spoontide makes the basis of his calculation, nor his method of dealing with those figures, nor his result.

Counsel: Will you tell me why?

Witness: He assumes a load of twenty-four dancers on a strip of floor 12 ins. wide and 26 ft. 6 ins. long—which is nearly one dancer to a square foot—and draws a triangle of forces (using the dancers' weight as the vertical load) in order to get the thrust along each 12 in. run of walls. In this he is guilty of three separate errors: one, twenty-four dancers is wrong; two, he is wrong in regarding their weight as a dead weight; and, three, he is wrong in his method of arriving at the thrust due to that weight.

It is true—witness continued—that at any moment twenty-four dancers might be upon a strip 12 ins. wide, but we are concerned with an *average* load and an *average* thrust, for the floor being continuous along its edges the thrust would be distributed along the wall. Mr Spoontide spoke of 320 dancers—that is impossible. I have danced in a ball-room which was so congested that dancing was difficult, and I found that the number dancing represented one to each 4·5 sq. ft. of floor area. The floor area in the present case is 1,219 sq. ft., so that allowing 4·5 ft. for each dancer we get 270 dancers. The dance in progress in this case, the "gallop," could not, however, be danced under such congested conditions, and I consider 200 the maximum figure that can be assumed. This represents one dancer to each 6 sq. ft. of floor area, or rather fewer than 4·5 dancers to each 12 in. cross strip of floor, which, allowing the high value of 140 lb. as the weight of each dancer, gives a total distributed load of 630 lb. on the 12 in. strip, which represents a central force, due to the load on half the strip, of 157·5 lb. The weight of the floor may be left out of account, but this 157·5 lb. is a live load, and must be augmented to represent the equivalent dead weight due to the impact of the dancers. A reasonable equivalent figure would be three times the live load of the dancers, giving an equivalent central dead load of 472·5 lb.

Counsel: That is, you say Mr. Spoontide's figure of 590 lb. is greater than the weight actually was?—Yes, twenty-five per cent. too great.

Now, Mr. Randegger, as regards the horizontal thrust on the wall: Do you agree with Mr. Spoontide's figure of seven tons?—No, I do not. It is a ridiculous figure. It is about seven times what it could have been.

How do you explain that, Mr. Randegger?—The reason is obvious: he has regarded the floor as absolutely rigid—more rigid than cast steel. He has made no allowance for the lateral elasticity of the floor.

Counsel: Will you tell the arbitrator, Mr. Randegger, what the facts are, in your opinion?—Witness: The first point is that the elasticity of the floor would greatly reduce the apparent horizontal thrust on the wall, calculated in the manner Mr. Spoontide has adopted. A piece of material of any given dimensions, on being compressed a certain amount, can offer only a certain resistance depending on its modulus of elasticity, and if this is known the resistance can readily be calculated. The modulus of elasticity at right angles to the grain of American maple is, so far as I know, not on record, and I have not made experiments to determine it; but the lateral compression of maple for a given load has been determined. It has also to be remembered that the small amount of moisture in the boards when they are laid; the amount of pressure brought to bear on them by the flooring cramps; the amount of moisture absorbed after the floor was laid, and the effect of that added moisture in causing the boards to expand, are all contributory in establishing the conditions which existed in the floor when it buckled; and some of these data it would now be impossible to ascertain. The facts upon which I base my opinion are that even if the expansion of the floor, due to moisture, had not been resisted by the walls, it would not have been more than 0·75 of an inch for the half strip of floor we have been considering. This I have derived from my own experiments.

Now—witness continued—it is agreed that the floor bulged 6 ins. This would allow an expansion of rather more than 0·1 in. Thus the reaction of the side walls could, at the most, have caused a compression of the flooring boards of about 0·6 in. in the half length of strip. This strip being 12 ins. wide, and the boards $\frac{7}{8}$ in. thick, gives an area of 10·5 sq. ins. of wood in compression. The length in compression is 13 ft. 3 ins. The combining of these data with the modulus of lateral elasticity of the wood gives—if the floor had not buckled, or if it had been forced flat again after buckling—a lateral, or horizontal, thrust of about one ton for the strip, instead of seven tons arrived at by Mr. Spoontide. I find that the live load, even after trebling it for shock, was totally inadequate to flatten the floor all over, when once it had buckled.

Counsel: So you arrive at a total thrust along the whole length of wall of 46 tons, as against Mr. Spoontide's figure of 320 tons?—Yes.

Now as regards Mr. Spoontide's evidence of the moment of stability and the upsetting moment of these walls; I hand you this diagram (figure four) and the calculations given in evidence by him. Do you agree his figures, Mr. Randegger?—Partly, yes; that is, I practically agree his moment of stability.

Counsel: Will you please tell the arbitrator with what you do *not* agree?—Witness: The turning point of the wall is fixed by Mr. Spoontide at the outside of the joint immediately above footings. That is well enough for an elementary exposition of the principles of upsetting moments in walls, but, actually, the angle of the bricks at the turning point would spall off or crush when the weight of the wall was thrown over upon the angle. In addition to this objection, a wall is not a rigid slab; it is elastic, it will bend; and should such a wall be forced over, the deflection would be distributed among a number

of joints and there would be a slight compression of the mortar joints and bricks on the outside, and a slight expansion of them on the inside. The fulcrum would be more likely to be at the point where the plane of the outside face of the wall meets the top of the concrete foundation.

Counsel: In what respects do your results differ from Mr. Spoontide's?—Witness: There are small differences in my estimates of weight of materials, but these are of little consequence: I have taken the dead weight of roof at 15 lb. per square foot, and brickwork at 120 lb. per cubic foot, as against Mr. Spoontide's 12 lb. and 112 lb. My chief difference is that—for the reason just given—I take the lever arm of the upsetting moment to be 27 ins. instead of 18 ins. and the maximum thrust to be one ton *if* the buckled floor were completely flattened; but my calculations show that the live load would *not* so flatten the floor, therefore the thrust would be less than one ton and consequently the upsetting moment must have been something less than 27 ton-ins. compared with Mr. Spoontide's 126 ton-ins.

Counsel: That is to say, the weight of the dancers would not push the wall over?—No, it could not do so.

If Mr. Spoontide were right in his statement that the moment of stability was $4\frac{1}{2}$ ton-ins. and the upsetting moment 126 ton-ins., would the weight of the dancers have pushed the wall over?—No.

Counsel: Please explain your answers, Mr. Randegger.—Witness: The material thing is the distance through which the thrust can act. What I mean to express is that, as the wall yields to the thrust, the boards expand—that is, the amount by which they are (or could be) compressed becomes less, and therefore their thrust becomes less until, if and when there is no compression, there is no thrust. The upsetting moment being greater than the moment of stability, the wall will *begin* to be pushed over, and as long as the thrust is sufficient it will go on being pushed over until the centre of gravity of the wall is vertically over the turning-point, when instability will be reached and the wall will topple over: but the fact is that the maximum thrust does *not* continue, so that, for the reason just given, the wall is not pushed over. It is common ground that the maximum distance through which any thrust could act from the centre of the floor towards each wall was—disregarding the compression of the wood—less than 1 in., and even this travel would only carry the wall over 2·5 ins. measured at the height of its mass centre; whereas it would have to be pushed over 7 ins. at this point before instability was reached.

Counsel: If, as you say, Mr. Randegger, the weight of the dancers could not have thrown the wall over, to what do you attribute the collapse of the building?—Witness: To the synchronization of the rhythmic impact of the dancers with the natural period of vibration of the walls. It is well known that if even a small force is applied periodically to a body, and this period is the same as the natural period of vibration of that body, then the amplitude of the vibrations or oscillations of that body get larger and larger. This, in my opinion, is what happened to the walls; and when once the amplitude was such that a vertical line through the mass centre of the wall fell beyond the base—which happened when the mass centre had been pushed over 7 ins.—the wall was bound to topple over. The roof principals, however, by opposing the outward movement of the top of the walls, resisted their tendency to overturn.

Counsel: How do you explain, then, Mr. Randegger, that the building collapsed?—Witness: I have made calculations from the drawing (figure four) showing in detail the construction of the roof principals. I find that though the bracing of the roof was sufficient for its purpose and that any slight outward thrust was met by the pier abutments at the point of support of principals, yet the position of the collar tie, and the consequent leverage which any outward movement of the walls would bring against it, was such that directly there was a tendency for the walls to move outwards—in fact, directly the value of the piers as an abutment was nullified by the push of the floor—the bolts through the joint of the collar and principal rafter would shear through the tenon, the collar tie would yield, and the roof would spread and help push the walls over. I disagree with Mr. Spoontide when he says "the walls gave way and let the roof down." The periodic outward pull of the top of the wall on the feet of the principals—due to the dancing—broke the tie of the collar by shearing. Directly the tie broke, the forces tending to tear the principals apart were increased—the roof spreading by its own weight—and pushed the walls over.

Counsel: I understand you to say, Mr. Randegger, that neither the buckling of the floor, nor the standing and irregular moving about upon the floor of the persons present, would have caused the walls to move?—That is so. The floor in its buckled state under those conditions would have supported the weight of the persons in the hall.

I also understand you to say that nothing but continued violent dancing, synchronizing with the natural period of vibration of the wall, could have caused the collapse?—Continued energetic and synchronous dancing. Yes, that is so.

Mr. Chawlegger (cross-examining): I understand you consider yourself an expert, Mr. Randegger?

Witness made no reply.

The Arbitrator: Answer the learned Counsel's question, please.

Witness: He has asked no question; he has only told me he understands I consider myself an expert.

The Arbitrator to Counsel: Please put your question, Mr. Chawlegger.

Counsel: Are you an expert?—In what, do you mean?

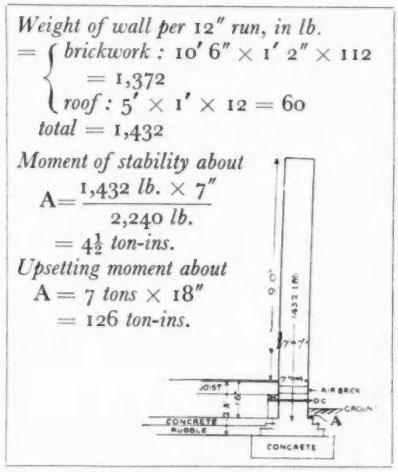


Figure four. Diagram given in evidence by Mr. Ronald Spoontide, F.S.I., showing moments of stability and upsetting.

Counsel: In the design and calculation of buildings?—No. I am not an expert in building-design, and I am certainly not an expert in the calculation of buildings, as I do not know how buildings can be calculated and have never attempted to calculate one.

Counsel: Don't quibble, sir. Answer the question.—I have answered it.

The Arbitrator: I must ask you, Mr. Randegger, to do your best to interpret Counsel's questions as he intends.

Witness: I shall be glad to do so, sir, if Counsel will honestly apply himself to get the information he wants; but as he obviously wishes merely to discredit my standing as a professional man and throw confusion—and not light—upon the evidence I have given, I am not prepared to help him by assuming his meaning when he puts questions which are frankly nonsensical.

The Arbitrator: I must ask you not to make speeches, sir. Your last words were most improper.—Then I withdraw those words, Mr. Arbitrator, and leave you to substitute any others which convey to you the same meaning. I have come here as a professional man of a certain standing who has made the



The north side of Fore Street, Hatfield. Reproduced from a measured drawing by Mary B. Crowley

fundamental principles of some branches of engineering a life-study, and I do not see why——

The Arbitrator : I cannot let you go on, Mr. Randegger. I will see that Counsel does not overstep the mark.

Counsel (*acidly*) : May I be permitted to inquire of you, Mr. Randegger, whether you are aware that authorities differ widely on the matters upon which you have, in your evidence, been laying down the law ?—Certainly you may.

The Arbitrator : Answer the question, sir.—I have done so.

The Arbitrator (to Counsel) : Repeat it, Mr. Chawlegger.

(Counsel did so.)—Witness (to Counsel) : Certainly, you may do so.

The Arbitrator : That is no answer, sir.

Witness : Pardon me, Mr. Arbitrator, the learned Counsel asks me if I will permit him to put a particular question. I answer, Yes, certainly, I will permit him to do so.

The Arbitrator : Mr. Randegger, I cannot allow any more of these verbal prevarications. Mr. Chawlegger, you will help me if you put your questions in a direct way.

Counsel : Is it a fact that authorities differ widely as to the matters adduced by you in evidence ?—If you refer to the actual ascertained facts of the dimensions and methods of construction of the building, I answer, No. If you refer to the principles of physical science which I have used in arriving at my conclusions, No. If you refer to my *application* of those principles to this particular case, I still say, No; but if you refer to the discretion necessary to arrive at approximations where the facts are not all ascertainable, and to logical deductions and points of opinion, I answer, Possibly, and to a limited extent, Yes.

Counsel : So that is your opinion, is it ?—You asked me for my opinion. If you had wanted someone else's opinion, you should have said so.

The Arbitrator : That was a most unnecessary remark.

Witness : Are you referring, sir, to the learned Counsel's gibe?

The Arbitrator : No, sir. I was referring to your own comment. I cannot allow these thrusts at Counsel.

Witness : I submit, Mr. Arbitrator, that I am here expressly to give my opinion. If the opinion of some other——

The Arbitrator : I cannot listen to you, Mr. Randegger. Mr. Chawlegger, please continue your cross-examination.

Witness : I protest, Mr. Arbitrator, that Counsel is not cross-examining, but merely trying to humiliate and discredit me with jaded sneers, the stale stock-in-trade of his profession, which he will hire out to another client tomorrow.

Mr. Chawlegger : This is intolerable.

The Arbitrator : I have seriously to warn you, Mr. Randegger. Your last remark was most outrageous. You must apologize to Counsel.

Witness : I shall be glad to do so, Mr. Arbitrator, if the learned Council will withdraw his own offensive comment.

The Arbitrator : I can allow no conditions. A full apology and withdrawal is due to the learned Counsel. I am sure he will accept that apology if it is frank and sincere.

Witness : Mr. Chawlegger, I wish fully to withdraw anything I have said which has offended you and to tender my sincere regret that you galled me into retort. May I hope, sir, that you will respect *my* vocation now you know that I can better you in *yours*.

The Arbitrator : Mr. Randegger, this is all most deplorable. It is impossible to go on like this. I must appeal to you, and I will appeal to Mr. Chawlegger—whose self-control is commendable—to come to an understanding. I can assure Mr. Randegger that he will best serve the defendants' interests by taking no notice of the form in which questions are put to him; and I would suggest to Mr. Chawlegger that, in view of the witness's very particular dislike to a certain form of question, learned Counsel would serve his client best, and also oblige me, by adopting a form to which Mr. Randegger will not object.

Witness : I object to no questions that are honestly directed to testing my evidence. I welcome cross-examination. I am here expressly to elucidate technical points—so far as I am able.

The Arbitrator : That is a frank and reasonable statement. I am sure that Mr. Chawlegger will consider it to be so.

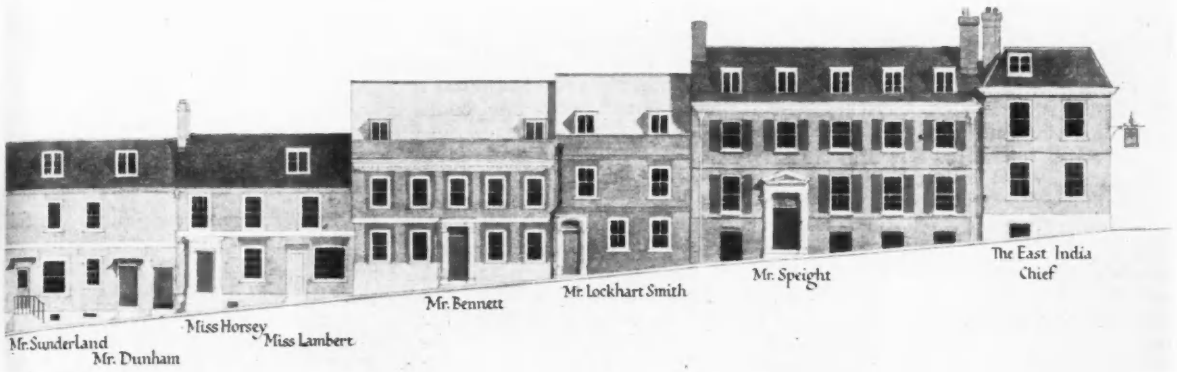
Mr. Chawlegger : Certainly. No one regrets this unfortunate interlude more than I do. I can assure Mr. Randegger that my questions were framed without any offensive intention.

Mr. Randegger : I quite understand that. I fully accept what the learned Counsel says, but——

The Arbitrator (*hastily*) : Well then, let's get on. Mr. Chawlegger, will you please resume your cross-examination.

Counsel : Why have you, in your calculations, not taken into account the piers built into the walls ?—Witness : They certainly had some effect in stiffening the walls, but they did not prevent the walls from moving beyond the point of stability. In the circumstances, the security they gave was immaterial, and as any allowance made for them would merely require a little greater violence on the part of the dancers to throw the wall down, I was not helping the defendants' case in ignoring the point.

Counsel : You said that the roof



and John Brandon-Jones. The names under the various houses are those of the present residents.

principals tended to prevent the walls falling over?—Witness: Certainly.

Counsel: But you do not state the extent of this tendency?—Witness: It would be a difficult matter to calculate—almost impossible; and as the only effect of such evidence would be to point to a greater violence in the assault on the walls, I felt entitled to leave it out.

Counsel: One point more. You spoke of the pendulum effect of the wall—the natural period of vibration, you called it—synchronizing with the rhythmic period of the impact of the dancers?—Yes.

Counsel: Do you know what the "period" of the wall was?—No.

Counsel: What grounds have you, then, for saying that it synchronized with the beat of the dance?—This ground—that the travel of the upsetting thrust was too small to push the walls over without the increasing swing due to synchronization. In no other way could the wall have been made to rock beyond its position of stability.

Counsel: How do you know that the normal thrust would not have moved the walls far enough to overcome the collar tie, and cause the roof to spread?—For the reasons given in my evidence in chief.

Counsel: Have you calculated the amount of the pull necessary to cause the bolt to shear through the collar tenon?—Yes.

Counsel: And therefore you know the amount of outward pull at feet of principals necessary to cause the shear?—Yes.

Counsel: You said just now that it was impossible to calculate the outward pull exerted by the wall on the feet of principals and due to synchronization?—Yes.

Counsel: How, then, can you say that the outward pull of the walls caused the tenon to shear, when you do not know what that pull was?—I find that the principals would fail by shearing of the tenon, because that was by far the weakest link in the chain. The amount of outward pull at the feet of the principals (additional to their normal thrust) necessary to produce the shear, was so small as to be set up directly the resistance of the abutment piers was substantially reduced by their outward swing. I know that it was, in fact, substantially reduced; and, in my opinion, the pull of the walls led to the giving way of the collar tie.

Mr. Twistle intimated that he did not wish to cross-examine; and Mr. Pitfall, waiving his right to re-examine, then told the Arbitrator that that closed his case. The Arbitrator said it was then too late to hear Counsel, but that he would resume for that purpose at ten o'clock the following morning.

(NEXT WEEK—V.: MR. PITFALL'S CLOSING ADDRESS.)

LITERATURE

GRUNDFORMEN DER EUROPÄISCHEN STADT

THIS book on the history of the town plan deals with a subject that has already been handled both specifically and in works on the general aspects of town planning, but it does—by adopting a new system in its examination of the question—bring a freshness into these studies, and offers a viewpoint that has a value of its own. Instead of regarding the subject as one to be dealt with purely chronologically, the author divides the types of town plan into three main groups, and traces the development of each of these through the ages, justifying his method by evidence that they all date from prehistoric times down to the present day.

The first type is that of the irregular plan not predetermined, but dominated by the nature of the site and the accidents of gradual development on the lines of least resistance. This form of city is illustrated by examples, such as the hill-top towns of archaic Greece, the old strongholds of the Italian Peninsula and of the Gauls, after which we naturally come to the numerous examples dating from the Middle Ages, closing with a reference to the romanticism that produced the tower groups of Bologna, Siena, and other Italian cities, which the author sees paralleled in the present attitude towards the skyscraper in America.

The next type reviewed is the city on a definite rectangular plan, which was adopted by the peoples of Egypt and Mesopotamia, but of which the examples from early times given here are all drawn from the plans by the Greek Hippodamos and his followers, thence passing by a natural transition to the Roman "Camp" and "Colonial" plans and on to the "Bastides" and other examples of mediaeval rectangular planning, which are followed by the towns laid out in Central Europe for "colonies" of religious refugees. These were planned with a very large central square, usually affording a site for the church and sometimes for other public buildings. This chapter closes with a note on the adoption of the rectangular plan by the United States.

The third group is less capable of exact classification. It may be termed the geometric, and includes some rectangular planning, though ostensibly concerned with radial plans and circular or polygonal city groups. An interesting investigation traces the circular type back to at least as far as the

Hittites, while reference is made to Greek descriptions of towns on more or less circular lines. There seems no doubt that in early times the tribal villages throughout Europe had their defences aligned as nearly on a circle as the formation of the site allowed, and some of these still remain as towns in Italy and Spain, while elsewhere the lines of mounds and ditches may be traced. Whether these medieval examples inspired the architects Averlino and Scamozzi to prepare their plans for ideal cities in circular form with radial streets, or whether these were based on first principles, can hardly now be determined, probably only the first hint came from what they could see on some Italian hill. At any rate, Scamozzi's Palma Nuova shows a complete spider's web plan, and it is curious that his so-called "Ideal" plan is less logical in that the polygonal star of the fortifications is filled with rectangular plotting, as was also the case with the plan of Mannheim, laid out in 1606, though here the fortress, enclosed in a subsidiary polygon, originally had a radial plan before it was removed in 1689, some thirty years before the Palace was built on its site.

Neu Breisach, planned by Vauban in 1699, is on the lines of Scamozzi's "Ideal" city, but at Karlsruhe, commenced in 1715, the radial lines dominate the plan. Other examples of radial planning are taken from Paris, Versailles, and Rome. At this point the author diverges from his hitherto well-defined course to study various architectural features in the city plan, and here will be found the only two instances taken from this country, namely, Sir Christopher Wren's plan for London—in which he makes the slip of referring to the Royal Exchange as the Bank of England—and the Woods' planning at Bath.

These latter pages would, it may be suggested, have been better employed in tracing the influence of the various types of historic plan on the planning of the later eighteenth century and the first half of the nineteenth. The author ignores all the important later developments, and though of course he is entitled to end where he chooses, it would have rounded off his studies to have carried them on for another century or so.

H. V. LANCHESTER

Grundformen der Europaischen Stadt. Von Joseph Gantner. Vienna: Verlag von Anton Schroll. 8vo, pp. 155. Illus. Sewn. 12s.

A MAP OF CAMBRIDGE

AN interesting and exceedingly useful little map, showing a bird's-eye view of Cambridge, is the first of a series of maps which are being published by Messrs. George Philip and Son, Ltd., entitled "The 'Wayabout' Series of Pictorial Maps."

The drawing has been prepared and drawn by Mr. G. Spencer Hoffman, M.A. (Cantab), and is reproduced in black-and-white. The streets and houses are shown in remarkable detail, while churches, colleges, public and other important buildings and all noteworthy features are clearly recognized.

The "Wayabout" Series of Pictorial Maps, No. 1, Cambridge. George Philip and Son, Ltd. Price 1s. 3d. net.



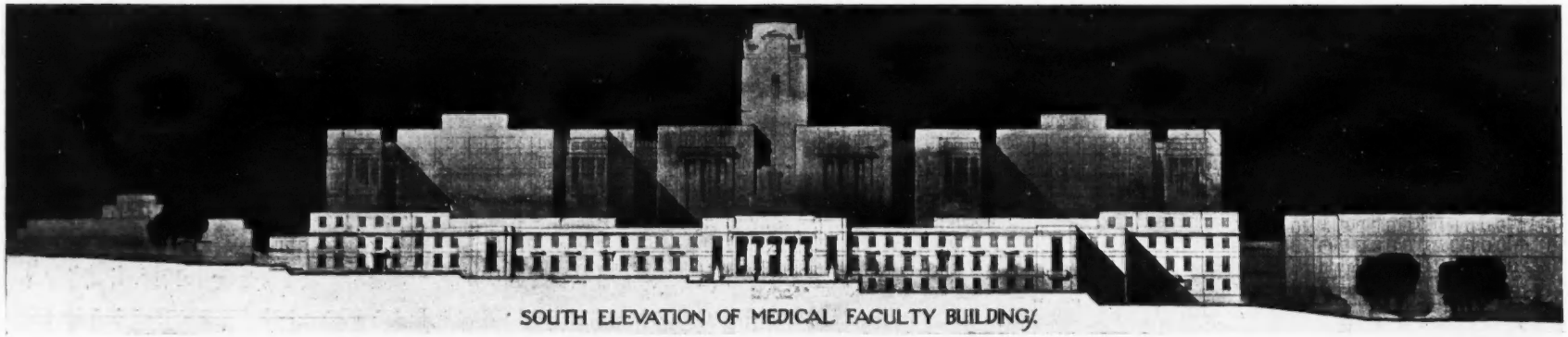
[*From* Grundformen der Europäischen Stadt.

An aerial survey of Bram, near Carcassone, Spain.

COMPETITION FOR NEW HOSPITAL CENTRE AT BIRMINGHAM



SOUTH ELEVATION OF HOSPITAL.



SOUTH ELEVATION OF MEDICAL FACULTY BUILDING.

THE WINNING DESIGN:
BY LANCHESTER AND LODGE

Two elevational drawings from the set of sixteen submitted by Lanchester and Lodge, of London, and awarded the first place in this competition, which was limited to twelve selected architects, all acknowledged experts in hospital design. Other awards were: Second, S. N. Cooke, Birmingham; third, Charles E. Elcock, of Elcock and Sutcliffe, London; fourth (two designs placed equal), Pite, Son and Fairweather, London; W. and T. R. Milburn, Sunderland. H. Percy Adams was the assessor. *Further particulars appear on the next page.*

COMPETITION NEWS

BIRMINGHAM HOSPITAL CENTRE

To Lanchester and Lodge has been awarded the first prize in this limited competition, which was assessed by H. Percy Adams, F.R.I.B.A. The new blocks, which are estimated to cost about £1,000,000 to erect, are intended to occupy a site adjacent to the Edgbaston buildings of Birmingham University, and include a central chapel, with wings accommodating surgical and medical wards, out-patients' and paying patients' departments, etc., and comprising the main hospital building. The main axis runs from north to south, with nurses' home on the highest ground, then the hospital, and nearest to the entrance from the University, stretching across the site, with a main façade of over 600 ft., is the medical faculty building, with the library overlooking the road leading to the University. This main axis meets the road leading from the University at an angle of approximately 60 degrees. Two of the architects' drawings of the winning design are reproduced on the previous page.

THE PAVILION OF LIGHT

Following are the prize-winners in the principal sections of the competition, organized by *The Daily Mail* and the General Electric Company, Ltd., in connection with the "Pavilion of Light" to be erected at the Ideal Home Exhibition. The competition called for designs for the decoration, furnishing and lighting of a lounge, a dining-room, a bedroom, a nursery, a kitchen and a bathroom, and also for designs for individual lighting fittings.

Lounge.—1st prize, 100 guineas—A. J. Taylor and A. C. Fare, F. and A.R.I.B.A., Bath, in collaboration with Charles A. Richter, John Parkinson Hully, and E. G. Hayward, Bath.

Dining-room.—1st prize, 100 guineas—Raymond McGrath, B. ARCH., A.R.I.B.A., Cambridge.

Bedroom.—1st prize, 100 guineas—Raymond McGrath, B.ARCH., A.R.I.B.A., Cambridge.

Nursery.—1st prize, 100 guineas—Miss F. Barker, A.R.I.B.A., Blackheath, S.E.3.

Bathroom.—1st prize, 50 guineas—A. S. Falconer, Falconer, Cross & Co., Ltd., Newcastle-on-Tyne.

Kitchen.—1st prize, 50 guineas—Karl Wilkinson, A.M.INST.C.E., Wilkinson and Son, Eastbourne.

The general quality of the designs submitted in each section was good. While it cannot be said that all prize-winners utilized to the full the adaptability of electric energy, the winning designs, in general, show commendable originality of thought.

CORRESPONDENCE

ART IN ADVERTISING

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—It has always seemed to me that the advertisement pages *should* equal in interest the editorial pages. I know of advertisers who would give their heads for a notice in, say, your leading article—but it is within the power of any firm to turn their page into something as good as the leading article itself.

Sketches such as those by Mr. J. D. M. Harvey, to which Mr. Burford drew attention last week, are, I take it, what any editor would be pleased to accept. The advertising facts accompanying them are news which any architect would be interested to read. Here we get the perfect advertisement. TILL

READERS' QUERIES

PANTILE ROOFS

E. C. M. writes: *Can a pantile roof of 50 degrees pitch be constructed thoroughly watertight without going to the expense of felt and boarding? In addition to the difficulty of making the side laps weather-tight I have heard it said that the excessive amount of water concentrated in the hollows percolates through the tiles themselves.*

There are many old roofs of pantiling up the north-east coast which appear to be thoroughly watertight though entirely without boarded or felt underlining, and many of these are entirely exposed beneath so that the under-surface of the tiles can be seen from below. There is no question that these tiles are satisfactorily non-porous. There are equally, however, many recent instances where direct penetration is the only possible explanation of proved leakages. I should hesitate to place faith in pantiling without underlining of some sort, which need not be more costly than the old expedients of strip-lathing and mortar fillets, or reeding and bedding. E. G.

DEFECTIVE DRAINS

C. S. writes: "*Trouble is being experienced with the drains at a caretaker's house and schoolroom attached to a church by backflow from the public sewer.*

"*The local authorities, a short time ago, put in a valve to stop the nuisance, but it does not appear to be effective. They now state that the owners must take up the drains, raise the level of the yard and all fittings, and put in a new drain. Plans were submitted and passed and the drains tested and approved by the local authority when the buildings were erected.*

"*Can you inform us on these two points: 1: Is there an effective valve which can be put in the drain to stop the backflow? 2: What is the position of the authority who approved the drains and who say they can do no more in the matter?*"

1: It is presumed that the backflow of sewage or storm-water comes through the gulleys and there is a special ball-valve gulley designed to prevent this. It is provided with a floating copper ball which is forced against an india-rubber seating which automatically prevents flooding.

2: Drainage plans are submitted to local authorities in accordance with bylaws made under the Public Health Acts for the purpose of determining whether the drains are "of such size and materials, and at such level and with such fall as on the report of their surveyor may appear necessary for efficient drainage."

The local authorities are the sole judges of what constitutes a sufficient drain, including the gradient to which it should be laid; and the plans having been submitted and passed, it would appear that the responsibility of abating the nuisance rested with the local authority. N. H.

CLEANING OAK FURNITURE

W. T. B. writes: "*With reference to my query, published in your issue for December 4 last, I stated that I had recently purchased some well-made and substantial oak furniture which has been exposed to the weather, and has in consequence become soiled. Could you advise me as to the best way to clean it, and to fetch up the surface to the natural oak colour?*

"*I should like to point out that it is the actual surface of the oak that has become 'soiled' with the weather, but unfortunately, for lack of definite information on my part, your expert has assumed that the surfaces have been polished, and that it is the* polish *that has become 'soiled' by the weather.*

"*The question I should like to ask your expert is, What is the best way of setting to work to clean actual bare oak surfaces that have been 'soiled' by the weather? The surfaces are quite sound and good.*"

Had W. T. B. enclosed a photograph it would have been of very great assistance to me in giving further advice, as I should have knowledge of the type and form of the actual furniture.

However, it appears to be a case of cleaning off, which is best done with glass-paper and a cabinet scraper. Knowledge of the method of use and sharpening (or burring of the edge) of the scraper is necessary, otherwise its use is liable to cause more harm than good. Possibly he can get a joiner to instruct him if he does not know; and of course its use is confined to plain flush surfaces. Very likely the oak will clean up by the use of sheets of glass-paper alone.

No. 1 first and finally No. 0 used over a large cork pad. For turned work, glass-paper backed on to canvas and torn in thin strips is necessary. Papering off should be concluded by rubbing with the grain. J. C. R.

SOCIETIES AND INSTITUTIONS

INSTITUTION OF STRUCTURAL ENGINEERS BRONZE MEDAL

Mr. A. H. Legat has been awarded the Institution of Structural Engineers, Midland Counties Branch, Bronze Medal, together with the L. Lister Kaye award of £7 7s. for his paper on "The Design and Construction of a Modern Factory in Reinforced Concrete," read before the Midland Counties Branch during the session 1928–29.

WEST YORKSHIRE SOCIETY OF ARCHITECTS

Mr. Gordon, the Leeds City librarian, in addressing a meeting of the above Society on "Architectural Literature," said that they were living in an age of paper and printing, as well as of electricity. A mere collection of books did not make a library until they had been codified and catalogued; and, further, until the scope of the literature provided was clearly brought to the notice of those interested in particular branches of art or technique. It was only possible to bring books into notice and into circulation by publicity. Formerly such tactics were regarded as undignified; but, happily, that idea was dying out.

Mr. G. H. Foggit, who presided, proposed a vote of thanks to Mr. Gordon. Colonel H. W. Barker seconded.

THE FORUMS OF ROME

Lecturing on "Roman Architecture" at the Central School of Arts and Crafts on Wednesday last, Sir Banister Fletcher, P.R.I.B.A., described the plan of ancient Rome on her seven hills, with the famous Forum Romanum in the central valley. The Capitoline Hill dominated this public meeting-place on one side and the Palatine Hill, with its Imperial Palaces, on the other. The Forum Romanum was the heart of Roman civic life, and held much the same position as the Acropolis of ancient Athens. With the growth of the city, he explained how successive Emperors, eager to ingratiate themselves with the people, built other Forums for the people which rivalled in size, but never in importance, the old Forum Romanum of the citizens. All these Forums were monuments to their Imperial founders and ornaments to the city.

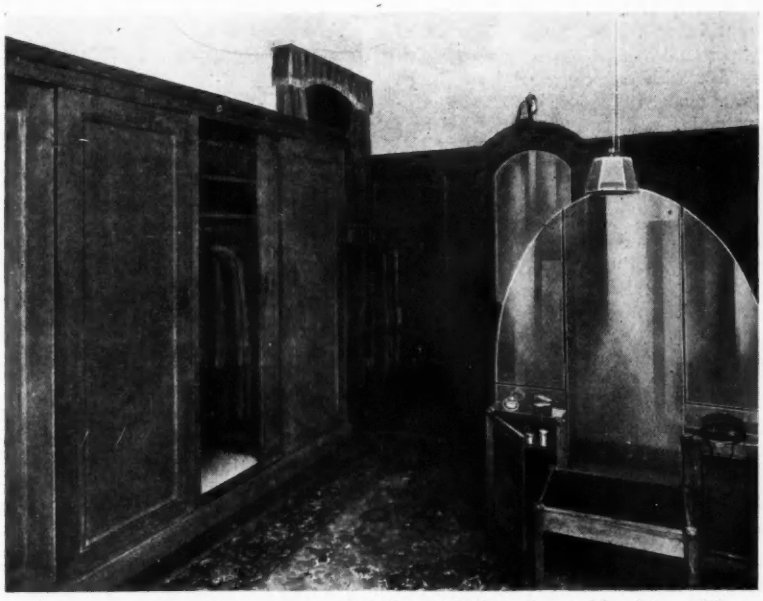
STYLE IN SCULPTURE

At a meeting of the Arundel Society in the Manchester Art Galley, Mr. Eric Gill delivered a lecture on "Style in Sculpture."

The characteristic modes of presentation among modern sculptors, he stated, might be classified as the commercial, the academic, and the revolutionary or independent. The commercial was that kind of goods which were supplied to order by means of middlemen—shopkeepers and contractors. The middleman having no personal interest in his work—he stood for service, not art—he was happy to supply whatever he was asked for, provided it were profitable.

The academic, he said, was that kind of goods turned out by the schools. Here the evil was not that of commercial degradation; it was rather a case of intellectual decay.

Revolutionary and independent sculpture was revolutionary in both senses of the word. It was both a turning back, a return apparently to normal things, and it was a revolt against commercialism and the academic. The fact that such sculptures were a revolt against stylistic imitation did not prevent the unthinking critic from attempting to find a label for them.



A Compactom fitment scheme in one of the flats at Chiltern Court, Marylebone, W.1.

TRADE NOTES

The principal bedrooms in all the flats in Chiltern Court, Marylebone, are equipped with Compactom patent medicine cabinets built flush in the walls above the basins, where the mirror-faced doors form an ideal toilet adjunct. The interiors of these cabinets are opal-lined and have neatly designed galleries for bottles, etc. Crystal knobs, mirrors, studs and nickel spring locks complete the attractiveness of these fitments. In the ladies' cloakroom a great many clothes had to be properly housed in a comparatively small space, which, at the same time, had to be kept attractive.

The restaurant at Chiltern Court seats 250 people, and each diner has a properly-labelled hanger for every garment. An extraordinarily ingenious arrangement has been devised whereby additional clothing fitments, which are not normally required, may, by a touch of the hand, be extended across the window embrasures and brought into immediate use. The equipment of the cloakroom, carried out by Messrs. Compactom, includes not only the clothing fitments, but all the panelling and two uniquely fitted dressing tables. The whole work is executed in the modern spirit, in an elegant but restrained design. All the timber is Austrian oak, lime finished. Apart from the above contract work, which was executed under the direction of Mr. C. W. Clark, A.R.I.B.A., Messrs. Compactom have also been favoured with orders from tenants of the flats already occupied, for their well-known clothing cabinets and for complete fitment schemes.

Electrical Installation Work Good and Bad, published by the Electrical Contractors' Association (Incorp.), discusses the need for electrical "safety first," emphasizes the value of a sound installation, and gives examples of the cost of good and bad work. In the foreword the General Council have noted with grave concern the large amount of really dangerous electrical work now being executed throughout the country, and regards it as a duty to place before architects, and consumers of electrical energy generally, a statement in clear and non-technical terms concerning the principal points to be observed and the pitfalls to be avoided, in order that the maximum benefit may be derived with safety and security.

Mr. Walter Tapper, A.R.A., in the preface says: "I do not hesitate for one moment to give every support to the main contentions put forward in this interesting publication dealing with good and bad electrical installation work. The outstanding frankness

and sincerity of the following pages have brought home to me the significance of the 'personal contact' that we establish every day with our electrical installations and our modern domestic electrical equipment, and I am confident that a clearer appreciation of all the possibilities of this great public service and domestic help will be to the immediate good of the entire community."

Messrs. J. H. Sankey & Son, Ltd., Canning Town, have published an illustrated folder concerning "Sankmar" plastic paint, their latest speciality. It is claimed to be a reliable medium for giving interior decoration on walls or ceilings in permanent relief. "Sankmar" is a fine white powder which is mixed with water to a plastic paste. It is applied with a brush to any surface—wall board, plaster, cement, concrete, breeze or wood. It is then textured by the fingers, palm of the hand, scraper knife, comb, crumpled paper, sponge; or stippled with a hair, wire or rubber brush. After texturing (when wet) a celluloid plane is dragged over the surface to remove sharp points. "Sankmar" will normally dry over-night and then "Sankmar" surfacer is brushed on. This fills up the pores, making the surface ready to receive paints, colours, etc. After the surfacer has dried, any paint, lacquer, scrumble or graining colour of reputable manufacture can be used to give the finished colour effect. A copy of the folder, with, if desired, a small sample panel (free) showing a "Sankmar" texture, can be obtained from Messrs. J. H. Sankey and Son, Ltd. At their Westminster headquarters (9A, Tothill Street, S.W.1) the firm show a room of the Tudor period finished throughout in "Sankmar."

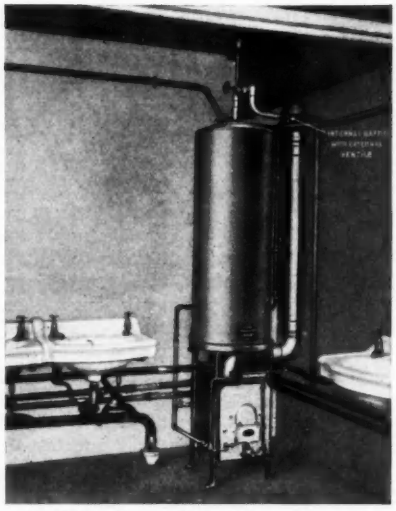
The accompanying illustration shows a "Victor" gas-heated hot-water supply apparatus, eleven of which have been installed in the first portion of the new lavatory equipment in Empire Hall, the new extension of Olympia. Each lavatory has a series of about eleven hand-basins situated on the various floors, and for each suite a "Victor" apparatus, with an insulated storage cylinder of 35 gallons capacity, is provided. The storage is of special construction, tested to 75 lbs. pressure, equal to 150 ft. head (nominal). One of the outstanding features of the apparatus is the new snap-action positive-control thermostat, which extinguishes the gas at the burner, leaving only the pilot-jet for re-ignition automatically when the water cools. The thermostat opens up whenever water is drawn, thus replenishing the supply as occasion may demand, without attention. The boiler unit, being separate, and connected to the cylinder (or tank), with flow and return pipes, delivers the high-temperature water the "Victor" boiler circulates to the top of the storage, and it is immediately available at the taps.

The Automobile Association have recently issued a booklet of seven-day drives radiating from Paris, each specially "logged" by experts. Illustrated by a chart, these tours have been individually selected to make some specific appeal, i.e. historic, architectural, scenic, etc.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :—

Empire Hall, Olympia (pages 193-198). General contractors : James Carmichael (Contractors), Ltd. Sub-contractors : Dorman, Long & Co., Ltd., steelwork; Francis Polden & Co., Ltd., electrical; J. H. Nicholson & Co., heating; Richard Crittall & Co., Ltd., ventilation; The Hoffmann Sprinkler Co., sprinklers; Siegwart Fireproof Floor Co., Ltd., floors; Stuarts Granolithic Co., Ltd., granolithic; Emerson and Norris, Ltd., stonework to main elevation; Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt; Carter & Co. (London), Ltd., terrazzo and sanitary fittings; J. Starkie Gardner, Ltd., metalwork to canopy, etc.; Fenning & Co., Ltd., marble, etc., to main entrance; London Brick Co. and Forders, Ltd., bricks; Crittall Manufacturing Co., Ltd., windows; Waygood-Otis, Ltd., goods lifts; Express Lift Co., Ltd., passenger lifts; Ewart and Sons, Ltd., copperwork; Le Grand, Sutcliff and Gell, Ltd., and Thos. Firth and Sons, "Staybrite" for turnstiles; Chance Bros. & Co., glass; London Sand Blast Decorative Glass Works, Ltd., ornamental glass; J. W. Gray and Sons, Ltd., lightning conductors; James Gibbons, Ltd., door furniture, etc.; Luxfer, Ltd., pavement lights; Brunswick Metal Casement Co., roof lights and patent glaxing; J. A. King & Co., Ltd., flat roof lights; General Electric Co., Ltd., floodlighting; Davey, Paxman & Co., Ltd., boilers; Thomas Potterton, Ltd., domestic gas hot-water system; Burn Brothers (London), Ltd., drainage; Benjamin Electrical Co., electric light fittings.



A "Victor" gas-heated hot-water supply apparatus, eleven of which have been installed in the lavatory accommodation in the Empire Hall, Olympia.

Melbourne House, Aldwych (pages 199-201). General contractors : Rice and Sons, Ltd. Sub-contractors : Lindsays Paddington Ironworks, Ltd., constructional steelwork; Diespeker & Co., Ltd., hollow-tile and concrete floors; Frank Mortimer, Ltd., Portland stone facings; Cooper, Wettern & Co., Ltd., granite dressings; Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt to roofs, etc.; Stuarts Granolithic Co., Ltd., concrete stairs; James Gibbons, Ltd., metal windows and ironmongery; Walter Macfarlane & Co., cast-iron gutter; Luxfer, Ltd., pavement lights and skylights; Benham and Sons, Ltd., heating and hot-water supply systems; Gilbert Seale and Son, Ltd., carving; J. W. Gray and Son, Ltd., lightning conductor; Birmingham Guild, Ltd., metal fascias and outside lamps; Smith, Major and Stevens, Ltd., passenger lifts; Haywards, Ltd., lift enclosure and balustrades; Matthew Hall & Co., Ltd., sanitary works; Leeds Fireclay Co., Ltd., sanitary fittings; Francis Polden & Co., Ltd., electrical installation; Smith and Ansell, Ltd., and Metro-Vick Supplies, Ltd., electric fittings; Morris, Singer & Co., bronze entrance doors, cast lead work to roof, and decorative glass work; Art Pavements and Decorations, Ltd., marble work and wall tiling; F. W. Clifford, internal decorative work.

House at Cuffley (pages 220-221). General contractors : Allen Fairhead and Sons, Ltd. Sub-contractors : Dorking Brick Co., facing bricks.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

1030 Commin, F. J. Composite sheets or tiles for building. January 10.

755. Fanta, F. Manufacture of building-bricks, etc. January 8.

530. Sea Sports, Ltd. Reinforced concrete structure. January 6.

SPECIFICATIONS PUBLISHED

323529. Schuster, K. R. Reinforced-concrete floors and like constructions.

323532. Carson, N. B. Construction of reinforced-concrete columns, beams, roofs, and/or floors.

ABSTRACT PUBLISHED

322099. Builders' cranes. Soc. Anon. Mécanique Moderne.

[For Competition Calendar see last week's issue.]

THE ARCHITECTS' DIARY

WEDNESDAY, JANUARY 29

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Circular Temples and Basilicas, or Courts of Justice of the Romans." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND, Gloucestershire Branch, and the Gloucester Architectural Association. At the Municipal Art Gallery, Cheltenham. Exhibition of architectural drawings, including photographs and models. Until January 29. 10 a.m. till 5 p.m. (Wednesdays and Saturdays, 10 a.m. to 8 p.m.) **10 a.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, S.W.1. Students' Meeting. "Highways, and a Survey of Future Developments." By A. H. Kennard, STUD.INST.C.E. H. Howard Humphreys, M.INST.C.E., will preside. **6.30 p.m.**

THURSDAY, JANUARY 30

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Scottish Castles." By E. M. W. B. Hughes (Mrs.), A.R.I.B.A., F.S.A. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Canaletto and Eighteenth-Century Venetian Landscape." By W. G. Constable, F.S.A. **5.30 to 6.30 p.m.**

INSTITUTION OF WELDING ENGINEERS. At the Chamber of Commerce, 95 New Street, Birmingham. "Modern Improvements: Electric Resistance Welding Machines." By C. A. Hadley. Followed by a Discussion. (Lantern Illustrations.) **7 p.m.**

SATURDAY, FEBRUARY 1

Sunrise, 7.40 a.m. Sunset, 4.49 p.m.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE ASSOCIATION OF ARCHITECTS. Dinner of the Northampton Branch at the Angel Hotel, Northampton. **6.45 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. Manchester and District Branch. Visit to works of J. G. Wagstaff, Ltd., Dukinfield.

MONDAY, FEBRUARY 3

R.I.B.A., 9 Conduit Street, W.1. Business Meeting. Election of Members. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Cantor Lecture. "Three Master Etchers: Rembrandt, Meryon, Whistler." By Harold J. L. Wright. (Lecture III.) **8 p.m.**

TUESDAY, FEBRUARY 4

ARCHITECTURE CLUB. Meeting of the Executive Committee, to be held at Oswald P. Milne's office, 64 Wigmore Street, W.1. **5.30 p.m.**

KING'S COLLEGE, Strand, W.C.2. Department of Civil Engineering. Last of a course of three lectures on "Bridges and Bridge-Construction." By C. H. Lobban, D.SC., A.M.INST.C.E. **5.30 p.m.**

WEDNESDAY, FEBRUARY 5

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "The Appreciation of Public Art in England Through the Ages." By Dr. Tancred Borenius.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE ASSOCIATION OF ARCHITECTS. Annual Meeting at Northampton. **4 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Ordinary Meeting. Paper by Joseph Kershaw. (Subject will be announced later.) **7 p.m.**

THURSDAY, FEBRUARY 6

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate: "That the Architectural Beauties of England be Preserved." Affirmative, E. J. Storry. Negative, G. B. Stickney. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. At the Hotel Cecil, Strand, W.C. Annual Dinner and Reunion of the Institution. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "The Raphael Cartoons." By A. P. Oppé. **5.30 p.m.**

FRIDAY, FEBRUARY 7

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "The Historical Background of Italian Art." By Professor Edmund G. Gardner. F.B.A. **5.30 p.m.**

SATURDAY, FEBRUARY 8

Sunrise, 6.32 a.m. Sunset, 5.51 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Third of a Series of Six Non-Technical Lectures on Present-Day Architecture. "The Creation of a Garden City." By Louis de Soissons, O.B.E., F.R.I.B.A., S.A.D.G. **3 p.m.**

MONDAY, FEBRUARY 10

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Automatic Control in Heating and Air Conditioning Installations." By B. T. Wingfield. 7 p.m. Light refreshments at 6.30 p.m. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. "Recent Developments in the Protection of Three-Phase Transmission Lines and Feeders." By T. W. Ross and H. G. Bell. **7 p.m.**

TUESDAY, FEBRUARY 11

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. First of a course of three lectures on Electrical Transmission by Overhead Lines (1) "The Mechanical Aspects of Overhead Transmission Lines, including Conductors, Insulators and Supports." By Charles W. Marshall, B.SC., M.I.E.E. **5.30 p.m.**

ARCHITECTURAL SOCIETY, University College, Gower Street, W.C.1. Centenary Appeal. The Society presents: R.U.R., by Karel Capek, in the College Gymnasium. Tickets, 3s. 6d. and 2s. 4d. (Also February 12 and 13.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Scottish Centre. At the Royal Technical College, Glasgow. "The Visit of the Institution to France." By W. B. Hird. **7.30 p.m.**

THURSDAY, FEBRUARY 13

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Print Making and Collecting." By W. M. Keesey, M.C., A.R.I.B.A., A.R.C.A., A.R.E. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Welding." By Major James Caldwell, M.INST.C.E. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Early Italian Engravings." By Professor A. M. Hind, O.B.E., F.S.A. **5.30 p.m.**

FRIDAY, FEBRUARY 14

TOWN PLANNING INSTITUTE, General Meeting at the Caxton Hall, Caxton Street, Westminster, S.W.1. "The Systematic Treatment of Road Signs." By H. V. Lanchester. F.R.I.B.A.

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Discussion on "Bracing for Wind and Vibratory Forces" to be opened by W. Smith. **7 p.m.**

SATURDAY, FEBRUARY 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to the Home Office Industrial Museum, Horseferry Road, Westminster, S.W.1. Meet at entrance. **2.15 p.m.**

MONDAY, FEBRUARY 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "The Thames Valley Preservation Scheme." By Professor Patrick Abercrombie, M.A., F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture I.) **8 p.m.**

TUESDAY, FEBRUARY 18

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Second of a course of three lectures on Electrical Transmission by Overhead Lines. (2) "Electrical Characteristics of Lines, Resistance, Inductants, Capacitance, Effects of Atmospheric Conditions on Insulation." By Charles W. Marshall, B.SC., M.I.E.E. **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. General Discussion on "Problems in Illuminating Engineering." Light refreshments at 6.30 p.m. **7 p.m.**

WEDNESDAY, FEBRUARY 19

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. Cantor Lecture, "Alfred Stevens: Architect-Sculptor-Painter." **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Honan Night. "Modern Architecture of Sweden." By B. B. Lewis.

THURSDAY, FEBRUARY 20

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate: "That under the present system of Competitions in England, the progress of Architecture is being retarded." Affirmative, J. G. Sidebottom. Negative, T. F. Firth. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "The Ancient Guilds and their Halls." By Allen D. Walker. (Lantern Illustrations.) **7.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Italian Furniture." By H. Clifford-Smith, F.S.A. **5.30 p.m.**

FRIDAY, FEBRUARY 21

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Royal Observatory, Greenwich." By Sir Frank Dyson, Astronomer Royal. **5 p.m.**

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE, Gower Street, W.C.1. "The Infirmary of the Mediæval Monastery, with special reference to the Abbey of Westminster." By Professor Percy Flemming, F.R.C.S. (Lantern Illustrations.) **5.30 p.m.**

SATURDAY, FEBRUARY 22

Sunrise, 6.0 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Fourth of a Series of Six Non-Technical Lectures on Present-Day Architecture. "Decoration and Furnishing." By G. G. Wornum, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

MONDAY, FEBRUARY 24

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Designing for the Film." By Lawrence Irving. 8 p.m. Exhibition of Film Settings (until March 22). **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture II.). **8 p.m.**

TUESDAY, FEBRUARY 25

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Last of a course of three lectures on Electrical Transmission by Overhead Lines. (3) "Typical Transmission Lines in use in Great Britain: Characteristic Features of Low, Medium and High Voltage Construction." By Charles W. Marshall, B.SC., M.I.E.E. **5.30 p.m.**

THURSDAY, FEBRUARY 27

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Social Life and Art in France during the Eighteenth Century." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Ferro-Concrete Cooling Towers." By T. J. Grueritte. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Timber Architecture in Old Houses and Churches." By Philip M. Johnson, F.S.A., F.R.I.B.A. (Lantern Illustrations.) **7.30 p.m.**

FRIDAY, FEBRUARY 28

R.I.B.A., 9 Conduit Street, W.1. London Architecture Medal, 1929. Latest date for submission of nominations.

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. Ordinary Meeting. At the Chamber of Commerce Buildings, New Street, Birmingham. "Types of Movable Bridges." By J. D. Vaughan, M.SC., A.M.INST.C.E. **6.30 p.m.**

ACCRINGTON COMPETITION. Latest date for submission of designs for the New Police and Fire Stations.

SATURDAY, MARCH 1

Sunrise, 6.47. Sunset, 5.39.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, Manchester and District Branch. Visit to the Manchester Newspaper Works and Offices. (Time will be announced later.)

MONDAY, MARCH 3

R.I.B.A., 9 Conduit Street, W.1. General Meeting, "The Design of Modern Railway Stations in Europe and America." By Frank Pick. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture, "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture III.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, South Midland Centre. At the University, Edmund Street, Birmingham. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. Also, "The Heat Pump—An Economical Method of Producing Low-Grade Heat from Electricity." By T. G. N. Haldane, M.A. **7 p.m.**

WEDNESDAY, MARCH 5

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Ordinary Meeting. "The Ford Factory, Dagenham." By Major E. H. Heathcote, M.A.(CANTAB.), F.R.I.B.A., A.M.INST.C.E., A.M.I.MECH.E. **7 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. Discussion on "The Space Required for Central Station Equipment." **7 p.m.**

THURSDAY, MARCH 6

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting: Nomination of Officers. "Classic Forms and English Geology." By Hope Bagenal, D.C.M., A.R.I.B.A. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Plywood: Its Influence on Modern Furniture Design." By Percy A. Wells. (Lantern Illustrations.) **7.30 p.m.**

SATURDAY, MARCH 8

Sunrise, 6.32. Sunset, 5.51.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Old and New Architecture." By the Hon. Humphrey Pakington, A.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

MONDAY, MARCH 10

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Some District Heating Systems." By L. J. Fowler, B.A. Light Refreshments at 6.30 p.m. **7 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Herts C.C. has decided to erect a double operating theatre at the Wellhouse Hospital, BARNET, in accordance with plans prepared by Messrs. Alfred Saxon Snell and Phillips, at an estimated cost of £9,000.

The BERMONDSEY B.C. has approved plans fo the layout of the Vauban Street area, and the erection of flats, at a cost of £11,330.

Sir Reginald Blomfield and Sons are to erect garage buildings at Sloane Avenue, CHELSEA.

Messrs. Young and Hall, architects, have prepared plans of alterations and additions to CLEVELAND STREET Infirmary (Middlesex Hospital annexe), preparatory to this unit becoming the hospital out-patients' department.

Plans passed by the EAST HAM Corporation: Shelter, Empire Kinema, Barking Road, for Mr. W. S. Trent (architect); alteration to screen and platform, Coliseum Cinema, Romford Road, for Mr. G. Coles (architect); alterations, 97 Browning Road, for Mr. A. H. Middleton (architect); eight houses, Dersingham Avenue, for Messrs. Herepath Bros.; eleven garages, Elsenham Road, for Mr. A. Talbot; thirteen garages, Caulfield Road, for Messrs. Wade and Jennings; alterations to form cinema, Palais de Danse, Wakefield Street, for Mr. J. R. Wilkins (architect).

The Middlesex Education Committee is to acquire a site at ENFIELD, for the erection of a secondary school.

The FINCHLEY Education Committee is to build a new public elementary school at Summers Lane.

The Middlesex Education Committee is to enlarge the County School and the Woodhouse School, FINCHLEY.

Plans passed by the FULHAM B.C.: Buildings, Townmead Road, Brill Street and Imperial Road, for Shell Mex, Ltd.; additional building, 163 Dawes Road, for Messrs. H. Brown and Son; flats, Harwood Road and New Kings Road, for Messrs. Lole & Co.

The HOLBORN B.C. has prepared a scheme for the erection of tenements in Devonshire Street.

The HORNSEY Corporation has selected a site in Queen's Avenue for the new branch library for Muswell Hill, and has given instructions for the preparation of plans.

Plans passed by the HORNSEY Corporation: Alterations and additions, 84 Tottenham Lane, for Mr. C. W. Boswell; six houses, Courtenay Avenue, for Mr. W. Quennell; alterations and additions, the Perfect Picture House, Tottenham Lane, for Mr. A. E. Stump, "Miraflores," Cedars Avenue, Rickmansworth, Herts; two houses, Wood Vale, for Messrs. Smerdon Bros.; sixteen flats, Fortis Green, for Rookfield Garden Village, Ltd.; house, Wood Vale, for Messrs. Smerdon Bros.

The L.C.C. is to construct an open-air swimming bath in KENNINGTON PARK, at a cost of £10,000.

The L.C.C. has passed plans submitted by Mr. B. George on behalf of Messrs. Derry and Toms, for the erection of premises at the corner of High Street and King Street, KENSINGTON.

The L.C.C. has prepared schemes for improvements at various parks at a cost of £22,000.

In view of the abandonment of the proposal for the reconstruction of the Marylebone Road baths the MARYLEBONE B.C. has appointed a committee to select a site for the erection of new baths.

Plans passed by the MARYLEBONE B.C.: Slaughter house, Zoological Gardens, for Mr. E. T. Salter; building, Ashland Place, for Mr. C. Burns; balconies, 8–10 Bulstrode Street, for Mr. J. Ingram; arbours, Lord's Cricket Ground, for Sir Herbert Baker; alterations, 114 Hallam Street, for Mr. S. H. Burdwood; shelter, Madame Tussauds, for Messrs. Humphreys, Ltd.; building, 54 Townshend Road, for Mr. G. Lowenstein.

Plans passed by the POPLAR B.C.: Extensions, Concordia Wharf, Cold Harbour, for the White Sea and Baltic Co.; new offices, 233–235 Old Ford Road, for Messrs. Lovegrove and Papworth; additions, "The Ship" public-house, High Street, for Messrs. J. S. Curtis and Sons; additions, Birdsfield Wharf, Old Ford Road, for Mr. G. J. Gumersall; additions at Lush and Cook's premises, Hepscott Road, for Mr. H. Smith; additions, Maconochie's Wharf, West Ferry Road, for Messrs. Hooper, Cushen & Co.

The SHOREDITCH B.C. recommends the purchase of a large site in Poole Street and Bridport Place for a housing scheme.

Plans passed by the SHOREDITCH B.C.: Alterations, 179-189 City Road (amended plan); dwellings, "Crossbow House" Phillip Street; reconstruction of "Victory" public-house, Great Cambridge Street; partial reconstruction of "The Flying Scud" public-house, 137 Hackney Road.

The STOKE NEWINGTON B.C. Electricity Committee has approved plans of the proposed new sub-station in Wordsworth Road.

Mr. John Murray is to rebuild the block of property on the island site bounded by the STRAND, Trafalgar Square and Duncannon Street.

The TOTTENHAM Education Committee is to erect an elementary school near Lordship Lane.

The Middlesex Education Committee is to provide new buildings for the TOTTENHAM Grammar School in White Hart Lane.



House, Ridgeway, Cuffley. Designed by Williams and Cox. A view from the south. The walls are of Dorking bricks, with red quoins and dressings. The roof is covered with red sand-faced tiles.

Plans have been submitted to the WESTMINSTER City Council by Messrs. Crace and Farmer for the erection of a building with frontages to Approach Road, Milford Lane, Tweezer's Alley and Water Street.

Plans passed by the WESTMINSTER City Council: Shop fronts and shelters, Princes Restaurant, 36-40 Jermyn Street, for Mr. Kempton H. H. Dyson; balconettes, 20 Grosvenor Street for Mr. F. Etchells; garage building, Babmaes Mews, for Mr. F. J. Wills; building, 1-5 St. Leonard's Street, for Messrs. Kirk and Kirk.

At a meeting of the Incorporated Church Building Society, held at WESTMINSTER, grants were made towards building new churches as follows: Addiscombe, S. Mildred, £250; Blackhall, S. Andrew, £200; Downham, S. Barnabas, £200. The following grants were made towards enlarging or repairing the churches at: Bolton-on-Dearne, S. Andrew, £75; Newchurch, SS. Peter and Paul, £70; Vauxhall, S. Peter, £100; Wellingborough, All Hallows, £50. The following grants were also paid for works completed at: Deeping, West, S. Andrew, £40; Fulham, S. Clement, £50; Goodmayes, S. Paul, £150; Upminster, S. Laurence, £175. In addition to the above, the sum of £810 was paid towards the repair of thirty-four churches from Trust Funds held by the Society.

The WOOLWICH B.C. has obtained sanction to borrow £70,000 for further housing advances.

EASTERN COUNTIES

The Essex C.C. has acquired land for a scheme for widening the mill bridge at HARLOW.

The LOWESTOFT Corporation is to carry out a scheme for the protection of the foreshore at Pakefield, as prepared by the borough surveyor, at an estimated cost of £8,600.

The LOWESTOFT Corporation Health Committee recommends approval of a scheme prepared by the borough surveyor for the provision of a new ward of thirty beds at the Joint Smallpox Hospital, at a cost of £6,833.

The PURFLEET U.D.C. is to erect ninety houses on a new estate.

The Essex C.C. has obtained land for the reconstruction of Ravens Brook bridge near ROMFORD.

SOUTHERN COUNTIES

Plans passed by the BOURNEMOUTH Corporation: Two houses, Beaufort Road, for Mr. S. Adams; bank, Charminster Road, for Barclays Bank, Ltd.; additions, Gervis Place, for Messrs. Plummers, Ltd.; additions, Palmerston Hotel, Christchurch Road, for Messrs. Ellis & Co.; additions, Littledown Road, for the Bournemouth Steam Laundry Co.; alterations and additions, 26 Somerly Road, for Mr. J. Weston; two houses, Brackendale Road, for Mr. M. Kerr; house, Percy Road, for Mr. C. V. Miller; house, Casel Avenue, for Messrs. Clarke and Clarke; two houses, Alumburst Road, for Mrs. D. Brown; house, Norton Road, for Mr. A. F. Holly; two houses and shops, Creen Road, for Mr. C. C. G. Osborne; house, St. Catherine's Road, for Mr. S. W. Savage; alterations and additions, 22 Hannington Road, for Mr. C. H. Cockerell; house, Wentworth Avenue, for Mr. H. Curry; house, Chessel Avenue, for Mr. A. Midgley; house, Gervis Road, for Major F. G. Sharp; hotel and garage, junction of Castle Lane and Broadway Lane, for Messrs. Strong & Co.; bungalow, Brightlands Avenue, for the Rev. H. Hopkinson; house, Brackendale Road, for Mr. E. W. Humphreys; eighty-one houses, Castle Park estate, for Mr. J. M. Leyland; seventeen houses, Wimbourne Road, for Mr. H. C. Barns; five houses, Truscott Avenue, for Mr. G. F. Jordan.

Plans have been submitted to the BRIGHTON Corporation by Messrs. Griffith Smith, Wade and Riley, of the proposed layout of the Heath Hill Farm estate.

The BRIGHTON Corporation has obtained sanction to borrow £35,250 for the erection of seventy-two houses on the Bevendean estate.

Plans passed by the BRIGHTON Corporation: Additions, 19 Lewes Crescent, for Mr. L. J. Marshall; restaurant and buffet, 82 and 83 King's Road, for Mr. Henry Sado; alterations and additions, Hotel Kittiwake, South Coast Road, Saltdean, for Mr. A. E. L. Carr; alterations and additions, "Channel View" Wick estate, Woodingdean, for Mr. R. Spendlove; garages and workshop, Ladysmith Road, for Mr. Geo. Ayling; two houses, Windlesham Road, for Mr. John Cooper; extensions to operating box, Princes Cinema, North Street, for Mr. William Hughes; two houses, Preston Drive, for Mr. H. B. Nixon; rebuilding, 35 and 37 West Street, and 1 and 3 Cranbourne Street, for Messrs. Bostel Bros., Ltd.; sanitary annexe, St. John's Home, Walpole Road, for the Committee of the Home; additions, "Black Lion Hotel," Patcham, for Messrs. G. R. Beard & Co.; extensions, 38 and 40 Robertson Road, for Mr. W. J. Mitchell.

The Oxford Education Committee is to obtain a site at COWLEY for the erection of a senior school.

The Oxford Electric Co., Ltd., is to erect an electric sub-station in High Street, OLD HEADINGTON.

The OXFORD Corporation has approved a revised layout of the Cutteslowe estate for the construction of 204 houses.

The OXFORD Corporation is seeking sanction to borrow £355,000 for two sites and the erection of 561 houses, which is the number of houses the Committee considers should be put in hand during the next twelve months.

Plans passed by the OXFORD Corporation: House, Sandfield Road, Headington, for the Manor Estate Co.; additions, Cowley Working Men's Club, Oxford Road, Cowley, for Messrs. Ushers' Wiltshire Brewery; lodge, Banbury Road, Cutteslowe, for the University Press; house, Capel Close, for Dr. Frank Savery; laundry, rear of convent of Notre Dame, for the Rev. Mother Superior; bungalow, Chestnut Grove, Headington, for Mrs. Cripps; bungalow, Chestnut Grove, Headington, for Mr. H. W. Jacobs; additions, Cornmarket Street, for Messrs. F. W. Woolworth & Co., Ltd.; shop, Cowley Road, for Mr. Delnevo; house, Old Road, Headington, for Messrs. Benfield and Loxley; additions, Radiator Branch, Woodstock Road, for Morris Motors, Ltd.; house, Donnington Estate, Iffley, for Messrs. Benfield and Loxley; new college buildings, rear of New-Inn-Hall Street, for the Church of England Trust Society; house, Woodstock Road, for Mr. G. H. Simmons; spring shop, Cowley, for Morris Motors, Ltd.

The PLYMOUTH Corporation is to proceed with works, at a cost of £18,400, in connection with the layout of the central park.

The PLYMOUTH Corporation has decided in favour of housing extensions and has asked the borough engineer to submit plans and estimates for a new type of house.

The PLYMOUTH Corporation has obtained sanction to borrow £7,900 for the construction of a new culvert at Pennycomequick, and has instructed the surveyor to proceed with the work.

The Herts C.C. has decided to approve a scheme for the extension of the ST. ALBANS infirmary.

SOUTH-WESTERN COUNTIES

Plans passed by the DORCHESTER Corporation: Alterations and additions, Old Grammar School, for Mr. A. E. Clayton; alterations and additions, 7 High West Street, for Mr. M. Fitzgerald; shop front, 39 South Street, for Mr. A. J. Dalton; house, Louds Mill Road, for Mr. M. Keat; two houses, Coburg Road, for Mr. Boundy.

Plans passed by the PAIGNTON U.D.C.: Four houses, Headland Park Road, for Mr. H. Proctor; ten shops, St. Michael's Road, for Messrs. C. and R. E. Drew; three houses (amended plan), Preston Down Road, for Mr. R. H. Stockman; three new roads, off Torquay Road, for the Paignton and District Land and Development Co., Ltd.; five bungalows, Oyster Bend, for the Coasts Estates, Ltd.; alterations to premises, Elmbank Road, for Paignton Co-operative Society, Ltd.; house, Roundham Avenue, for Messrs. Peeke Bros.; house, Cecil Avenue, for Mr. A. E. Knight.

Plans passed by the WEYMOUTH Corporation: Alterations, 87 and 88 St. Mary Street, for Mr. S. A. Jackson; six houses, Abbotsbury Road, for Messrs. Andrews and Andrews; alterations and additions, 3 and 4 Charlotte Row, for Messrs. Andrews and Andrews; three shops, St. Mary Street, for Mr. H. E. Sargeant; additions, Crown Hotel, for Messrs. Crickmay and Sons.

MIDLAND COUNTIES

Plans passed at BURSLEM: Three houses, Nile Street, for Mr. T. H. Hand; additions, Unicorn Works, Davenport Street, for Messrs. T. Hugses and Sons; additions, New Adelaide Pottery, for Messrs. Pyrofil, Ltd.; nine houses, off High Lane, for Mr. E. A. Bird; eight houses, Milton Road, for Mr. B. S. Phillips.

The NORTHAMPTON County Council has adopted a scheme, prepared by Messrs. Gotch and Saunders, for the erection of a new block at the Berry Wood Mental Hospital, to provide accommodation for additional beds.

Plans passed by the REDDITCH U.D.C.: Slaughter house, Chapel Street, for Mr. A. Bird; two houses, Birchfield Road, for Mr. H. Quiney; extension of factory, Millsboro Road, for Messrs. H. Terry and Sons, Ltd.; shop, Hewell Road, for Enfield Cycle Co., Ltd.

Plans passed by STOKE-ON-TRENT Corporation: Six houses, Trafalgar Road, for Messrs. Holloway & Co.; shop, High Street, for Co-operative Wholesale Society, Ltd.; two houses, Newfield High Street, for Mr. R. Wolworth; two steel-framed warehouses, Davenport Street, Longton, for Messrs. James E. Smith, Ltd.

NORTHERN COUNTIES

The BRADFORD Corporation is seeking a further loan of £45,000 in connection with the White Abbey area improvement scheme.

The BRADFORD Education Committee has approved plans submitted by the architect for extensions at the Thornbury Primary School.

The CHESTERFIELD Education Committee has submitted to the Board of Education plans for the provision of a modern mixed school at Tapton House.

The CHESTERFIELD Corporation has approved plans of the borough surveyor for the improvement at Horn's Bridge.

The Cheshire Education Committee is to proceed with the erection of an elementary school at ELLESMERE PORT.

The West Riding Education Committee is to extend the elementary school at GREAT PRESTON at a cost of £13,150.

The West Riding Education Committee has selected MEXBOROUGH as the most suitable centre for the erection of the proposed new mining institute.

The OSSETT Corporation is considering proposals either for the erection of new premises in Station Road, or improving the present public library.

The West Riding C.C. Health Committee reports that plans of the proposed sanatorium for women and children at SCRIVEN are in course of preparation.

The SHEFFIELD Corporation Housing Committee has prepared schemes for the reconstruction of two unhealthy areas.

Plans passed by the SOUTH SHIELDS Corporation: Alterations, Palace Theatre, Frederick Street, for Messrs. W. and T. R. Milburn (architects); stables, Imeary Street and Imeary Grove, for Mr. S. J. Stephenson, on behalf of Messrs. Ringtons, Ltd.; flats, Madeira Terrace, for Mr. Howard Hill.

At a meeting of the SOUTH SHIELDS Corporation Quay Committee, the borough engineer reported on a scheme for the extension of the Mill Dam Quay, the total cost of which, together with the necessary dredging of the river, and the provision of a crane for modern requirements, he estimated at between £20,000 and £25,000. He suggested that before going into the details of the scheme the Unemployment Grants Committee be approved on the question of making the maximum amount of grant in aid of the scheme, and the town clerk was asked to communicate with the Unemployment Grants Committee as suggested.

The Trafford Park Estates, Ltd., has prepared a scheme for an arterial road across TRAFFORD PARK.

The WEST RIDING C.C. is to reconstruct Apperley Bridge over the River Aire, at a cost of £16,000.

The WEST RIDING Education Committee has prepared a school building programme to cost £1,627,000.

The WEST RIDING County Council has approved of six schemes for the abolition of level crossings and six schemes for the reconstruction of weak bridges, estimated to cost £343,900.

The WEST RIDING County Council reports that the total estimates approved for the carrying out of Calverley and Horsforth new road and bridges amount to £168,589, which include the sum of £9,000 for the construction of a bridge over the Leeds and Liverpool Canal and the adjoining estate roadway. In addition there are various other items which have been taken into account, and in order to complete the works satisfactorily it will be necessary to provide a further sum of £465, making a total estimate of £169,054.

The Manchester Education Committee is to erect an elementary school at Mauldeth Road, WITHINGTON, at a cost of £21,500.

WALES

On behalf of the MERTHYR Corporation, Messrs. L. G. Mouchel and Partners are preparing a scheme for bridging the River Taff on the Abercanaid road.

The SWANSEA Corporation has decided to proceed with relief schemes amounting to £526,532.

Plans have been prepared by the Picton Cinema Company for the erection of a cinema, cafés and six shops at Picton Place, St. Helen's Road, SWANSEA.

SCOTLAND

The GLASGOW Education Committee is to erect an elementary school in Langrig Road.

The GLASGOW Corporation recommends the duplication of water mains at a cost of £150,000.

The GLASGOW Corporation Health Committee suggests a site near Shieldhall Road, for the erection of the proposed maternity hospital.

The GLASGOW Corporation has adopted a scheme for the improvement of areas in Calton district, showing the erection of 318 dwelling houses.

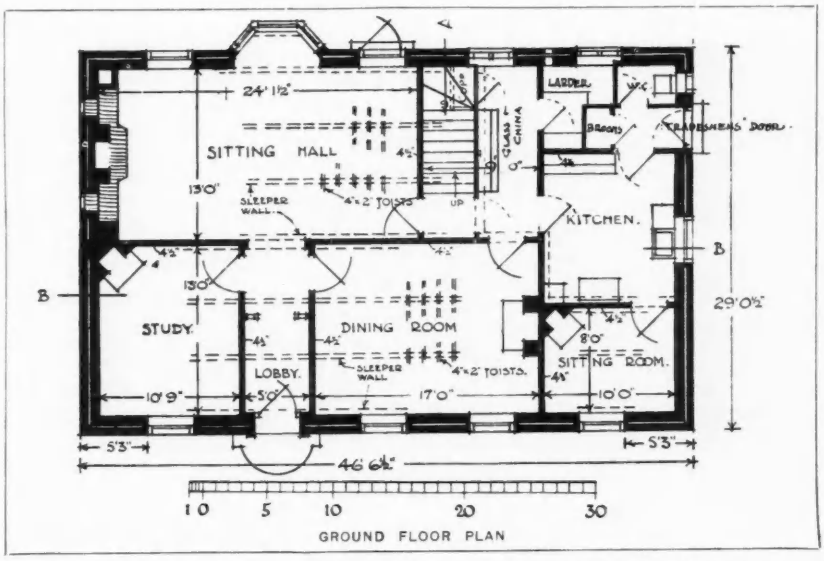
The GLASGOW City engineer has prepared plans for the transfer of Gorbais Library, from premises belonging to the baths department, to a new building to be erected on the site at South Portland Street and Norfolk Street, at an estimated cost of £23,000.

Messrs. Alexander M'Lellan, Ltd., are to erect eighty terrace houses in Aoudhouse Road and Holburn Road, Newlands, GLASGOW.

The GLASGOW Education Committee has obtained a site at Parkhouse for the erection of an elementary school.

The GLASGOW Corporation Housing Committee recommends the tender of Messrs. Henry Boot and Sons (Scotland), Ltd., £226,412, for the construction of 784 houses at Carnwadric, Pollockshaws.

The GLASGOW Corporation has asked the city engineer to prepare plans for the erection of baths and wash-houses at Barrowfield Street, Mile End, at an estimated cost of £38,000, and at Avenuepark Street, North Kelvin, at an estimated cost of £32,000.



House, Ridgeway, Cuffley. Designed by Williams and Cox. Ground-floor plan. On the first floor are five bedrooms and a bathroom. A photograph of the exterior of the building is reproduced on page 220.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 7	1 2½
A_1	Aberzavenny	S. Wales & M.	1 7	1 2½
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2½
A_2	Addlestone	S. Counties	1 6	1 1½
A	Adlington	N.W. Counties	1 7½	1 2½
A	Airdrie ..	Scotland	*1 7½	1 2½
C	Aldeburgh	E. Counties	1 3½	11½
A	Altrincham	N.W. Counties	1 7½	1 2½
B_2	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2½
A_2	Atherstone	Mid. Counties	1 6	1 1½
B_2	Aylesbury..	S. Counties	1 4	1 0
B_2	BANBURY..	S. Counties	1 4½	1 0½
B	Bangor ..	N.W. Counties	1 5	1 0½
A_1	Barnard Castle	N.E. Coast	1 7	1 2½
A	Barnsley ..	Yorkshire	1 7½	1 2½
B_2	Barnstaple	S.W. Counties	1 4½	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2½
A	Barry ..	S. Wales & M.	1 7½	1 2½
B_2	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2½
B	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A_2	Bewdley ..	Mid. Counties	1 6½	1 2
B_2	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 9	1 4
A	Birmingham	Mid. Counties	1 7½	1 2½
A_1	Bishop Auckland	N.E. Coast	1 7	1 2½
A	Blackburn	N.W. Counties	1 7½	1 2½
A	Blackpool	N.W. Counties	1 7½	1 2½
A	Blyth ..	N.E. Coast	1 7½	1 2½
B_2	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2½
A_2	Boston ..	Mid. Counties	1 6	1 1½
B	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2½
A_2	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2½
B_2	Bridgwater	S.W. Counties	1 4½	1 0½
A_1	Bridlington	Yorkshire	1 7	1 2½
A	Brighouse ..	Yorkshire	1 7½	1 2½
B	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7½	1 2½
B_2	Brixham ..	S.W. Counties	1 4	1 0
A_2	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2½
A	Burslem ..	Mid. Counties	1 7½	1 2½
A	Burton-on-Trent	Mid. Counties	1 7½	1 2½
A	Bury ..	N.W. Counties	1 7½	1 2½
A_1	Buxton ..	N.W. Counties	1 7	1 2½
A_1	CAMBRIDGE	E. Counties	1 6	1 1½
B_1	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 7½	1 2½
A	Carlisle ..	N.W. Counties	1 7½	1 2½
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B_1	Carnarvon	N.W. Counties	1 5	1 0½
A	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 7½	1 2½
B_1	Chatham ..	S. Counties	1 5	1 0½
B_1	Chelmsford	E. Counties	1 5	1 0½
A_2	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2½
A	Chesterfield	Mid. Counties	1 7½	1 2½
B_2	Chichester	S. Counties	1 4½	1 0½
A	Chorley ..	N.W. Counties	1 7½	1 2½
B_2	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2½
A	Clydebank	Scotland	1 7½	1 2½
A	Coalville ..	Mid. Counties	1 7½	1 2½
B	Colchester..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7½	1 2½
A_2	Colwyn Bay	N.W. Counties	1 6	1 1½
A_2	Consett ..	N.E. Coast	1 7	1 2½
A_2	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2½
A	Darwen ..	N.W. Counties	1 7½	1 2½
B_2	Deal ..	S. Counties	1 4½	1 0½
A_2	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2½
A	Dewsbury	Yorkshire	1 7½	1 2½
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2½
B	Dorchester	S.W. Counties	1 4	1 0
A	Driffield ..	Yorks	1 6	1 1½
A	Droitwich	Mid. Counties	1 6	1 1½
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7½	1 2½
A	Durham ..	N.E. Coast	1 7	1 2½
B_1	EASTBOURNE	S. Counties	1 5½	1 1½
A	Ebbw Vale	S. Wales & M.	1 7	1 2½
A	Edinburgh	Scotland	1 7½	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S Wales & M.	1 7	1 2½
A_2	Exeter ..	S.W. Counties	*1 6½	1 2
B_2	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A_2	Filey ..	Yorks	1 6	1 1½
A	Fleetwood..	N.W. Counties	1 7½	1 2½
B_2	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham..	N.W. Counties	1 7½	1 2½
B_2	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2½
B_1	Gillingham	S. Counties	1 5	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6½	1 2
A_2	Gosport ..	S. Counties	1 6	1 1½
A_2	Grantham	Mid. Counties	1 6	1 1½
A_1	Gravesend	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 7½	1 2½
A	Grimsby ..	Yorkshire	1 7½	1 2½
B_1	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX	Yorkshire	1 7½	1 2½
A	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate	Yorkshire	1 7½	1 2½
A	Hartlepools	N.E. Coast	1 7½	1 2½
B_1	Harwich ..	E. Counties	1 5	1 0½
B_2	Hastings ..	S. Counties	1 4½	1 0½
A_2	Hatfield ..	S. Counties	1 6	1 1½
B	Hereford ..	S.W. Counties	1 5½	1 1½
B_1	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 7	1 2½
A_1	Howden ..	N.E. Coast	1 7	1 2½
A	Huddersfield	Yorkshire	1 7½	1 2½
A	Hull ..	Yorkshire	1 7½	1 2½
A	ILKLEY ..	Yorkshire	1 7½	1 2½
A	Immingham	Mid. Counties	1 7½	1 2½
B	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 4	1 0
A	JARROW ..	N.E. Coast	1 7½	1 2½
A	KEIGHLEY	Yorkshire	1 7½	1 2½
B_1	Kendal ..	N.W. Counties	1 5	1 0½
B_1	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6½	1 2
B_2	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2½
A_2	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2½
A	Leek ..	Mid. Counties	1 7½	1 2½
A	Leicester ..	Mid. Counties	1 7½	1 2½
A	Leigh ..	N.W. Counties	1 7½	1 2½
B	Lewes ..	S. Counties	1 4	1 0
A_2	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2½
A	Liverpool ..	N.W. Counties	*1 9	1 4
A_2	Llandudno ..	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2½
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2½
A	Loughborough	Mid. Counties	1 7½	1 2½
A_2	Luton ..	E. Counties	1 6½	1 2
A	Lytham ..	N.W. Counties	1 7½	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 7	1 2½
B_1	Maidstone	S. Counties	1 5	1 0½
A_2	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2½
A	Mansfield ..	Mid. Counties	1 7½	1 2½
B_2	Margate ..	S. Counties	1 4½	1 0½
A_2	Matlock ..	Mid. Counties	1 6	1 1½
A_1	Merthyr ..	S. Wales & M.	1 7	1 2½
A	Middlesbrough	N.E. Coast	1 7½	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7½	1 2½
A	Morecambe	N.W. Counties	1 7½	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2½
A	Nelson ..	N.W. Counties	1 7½	1 2½
A	Newcastle..	N.E. Coast	1 7½	1 2½
A	Newport ..	S. Wales & M.	1 7½	1 2½
A	Normanton	Yorkshire	1 7½	1 2½
A_1	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 7½	1 2½
A	North Shields	N.E. Coast	1 7½	1 2½
A_2	Norwich ..	E. Counties	1 6½	1 2
A	Nottingham	Mid. Counties	1 7½	1 2½
A	Nuneaton ..	Mid. Counties	1 7½	1 2½
B	OAKHAM..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2½
A_2	Oswestry ..	N.W. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2½
B_2	Pembroke	S. Wales & M.	1 4	1 0
A	Perth ..	Scotland	*1 7½	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2½
A	Pontefract	Yorkshire	1 7½	1 2½
A_1	Pontypridd	S. Wales & M.	1 7	1 2½
A_2	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2½
A	QUEENSFERRY	N.W. Counties	1 7½	1 2½
A_2	READING	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A_2	Retford ..	Mid. Counties	1 6	1 1½
A_1	Rhondda Valley	S. Wales & M.	1 7	1 2½
A_2	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2½
B_1	Rochester ..	S. Counties	1 5	1 0½
A_1	Ruabon ..	N.W. Counties	1 7	1 2½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens..	N.W. Counties	1 7½	1 2½
B_2	Salisbury ..	S.W. Counties	1 4	1 0
A_1	Scarborough	Yorkshire	1 7	1 2½
A	Scunthorpe	Mid. Counties	1 7½	1 2½
A	Sheffield ..	Yorkshire	1 7½	1 2½
A	Shipley ..	Yorkshire	1 7½	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6½	1 2
A_2	Slough ..	S. Counties	1 6	1 1½
A_2	Solihull ..	Mid. Counties	1 6½	1 2
A_2	South'pton	S. Counties	1 6	1 1½
A_2	Southend-on-Sea	E. Counties	1 6½	1 2
A	Southport..	N.W. Counties	1 7½	1 2½
A	S. Shields ..	N.E. Coast	1 7½	1 2½
A_2	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2½
B_1	Stroud ..	S.W. Counties	1 5	1 0½
A	Sunderland	N.E. Coast	1 7½	1 2½
A	Swadlincote	Mid. Counties	1 7½	1 2½
A	Swansea ..	S. Wales & M.	1 7½	1 2½
B	Swindon ..	S.W. Counties	1 5½	1 1½
A_1	TAMWORTH	N.W. Counties	1 7	1 2½
B_1	Taunton ..	S.W. Counties	1 5	1 0½
A	Teesside Dist.	N.E. Counties	1 7½	1 2½
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2½
A_1	Torquay ..	S.W. Counties	1 7½	1 2½
C	Truro ..	S.W. Counties	1 3½	11½
B_1	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2½
A	Tyne District	N.E. Coast	1 7½	1 2½
A	WAKEFIELD	Yorkshire	1 7½	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7½	1 2½
A_2	Warwick ..	Mid. Counties	1 6½	1 2
A_2	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2½
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A_2	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2½
A	Wigan ..	N.W. Counties	1 7½	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 6	1 1½
A_2	Wrexham ..	N.W. Counties	1 7	1 2½
B	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 5	1 0½
B_2	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4d. *per hour*; LABOURER, 1s. 4d. *per hour*; NAVVY, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
IF left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 1 17 6
DO. 6-2-1, per yd. cube 1 12 6
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.

LIAS-LIME CONCRETE, per yd. cube .	£1	14	0
BREEZE CONCRETE, per yd. cube .	1	7	0
DO. in lintels, etc., per ft. cube . .	0	1	6

CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 4d. *per hour*; TIMBERMAN, 1s. 5½d. *per hour*; BRICKLAYER, 1s. 9d. *per hour*; PLUMBER, 1s. 9d. *per hour*; WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0

Portland cement and sand, see "Excavator" above.

Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3
Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9d. *per hour*; LABOURER 1s. 4d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0

Cement and sand, see "Excavator" above.

Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	32	0	0
DO. in cement do., per rod	34	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run .	0	6	0
FLAUNCHING chimney pots, each .	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra . .	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra . .	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra .	0	0	10
WEATHER pointing, do. do. . .	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup. . . .	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each . .	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup. . . .	0	11	0
SLATE DAMP COURSE, per ft. sup. .	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd. . .	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup. . .	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each .	0	0	3

MASON

MASON, 1s. 9d. *per hour*; DO. *fixer*, 1s. 10d. *per hour*; LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6

Cement and sand, see "Excavator." etc., above.

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup. . . .	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup. . . .	0	4	10
JOINTS, arch, per ft. sup. . . .	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup. .	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run . .	0	1	4
HALF SAWING, per ft. sup. . . .	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed .	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup. . .	0	1	6

SLATER AND TILER

SLATER, 1s. 9d. *per hour*; TILER, 1s. 9d. *per hour*; SCAFFOLDER, 1s. 5d. *per hour*; LABOURER, 1s. 4d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies				£14	0	0
Countess				23	0	0
Duchess				32	10	0
Old Delabole	*Med. Grey*			*Med. Green*		
24 in. × 12 in.	£42	11	3	£45	1	0
20 in. × 10 in.	31	4	3	33	0	6
16 in. × 10 in.	20	18	0	22	4	9
14 in. × 8 in.	12	1	0	12	16	3
Green Randoms, per ton				8	3	9
Grey-green do., per ton				7	3	9
Green peggies, 12 in. to 8 in. long, per ton				5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2

Cement and sand, see "Excavator," etc., above.

Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey			Med. Green		
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square .	3	7	6
Vertical Tiling, including pointing, add	18s.	0d.	
per square.			
FIXING lead soakers, per dozen .	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square . . .	0	10	0
LABOUR only in laying slates, but including nails, per square . .	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 9d. *per hour*; JOINER, 1s. 9d. *per hour*; LABOURER, 1s. 4d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq. . .	£1	4	6
DO. *T. and G., 1 in., per sq.* . .	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in. .	0	1	6
Mahogany, Honduras, per ft. sup. of 1in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.* . .	0	2	6
DO., *African, per ft. sup.* . . .	0	1	3
Teak, per ft. sup. of 1 in. . . .	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube . .	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube . .	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd. .	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq. .	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run .	0	0	4½
DO. 9 in. wide and over per ft. sup. .	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour*; MATE, *do.* 1*s.* 4*d. per hour*; ERECTOR, 1*s.* 9½*d. per hour*; FITTER, 1*s.* 9½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour*; MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. 4 *in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. 3 *in., per yd.*	0	1	8
DO. 4 *in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. 4 *in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ¾ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 4*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. 4 *ft. sup.* ,,	0	2	3
DO. 6 *ft. sup.* ,,	0	2	6
DO. 20 *ft. sup.* ,,	0	3	1
DO. 45 *ft. sup.* ,,	0	3	3
DO. 65 *ft. sup.* ,,	0	3	5
DO. 100 *ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. ¼*-in., per ft.*	0	0	6¾
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 8*d. per hour*; LABOURER, 1*s.* 4*d. per hour*; FRENCH POLISHER, 1*s.* 9*d. per hour*; PAPERHANGER, 1*s.* 8*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	1
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster-board, per yd. sup. from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. from	0	2	8
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 6½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	5	—	7½	7	—	9½	—	—	1 9	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—

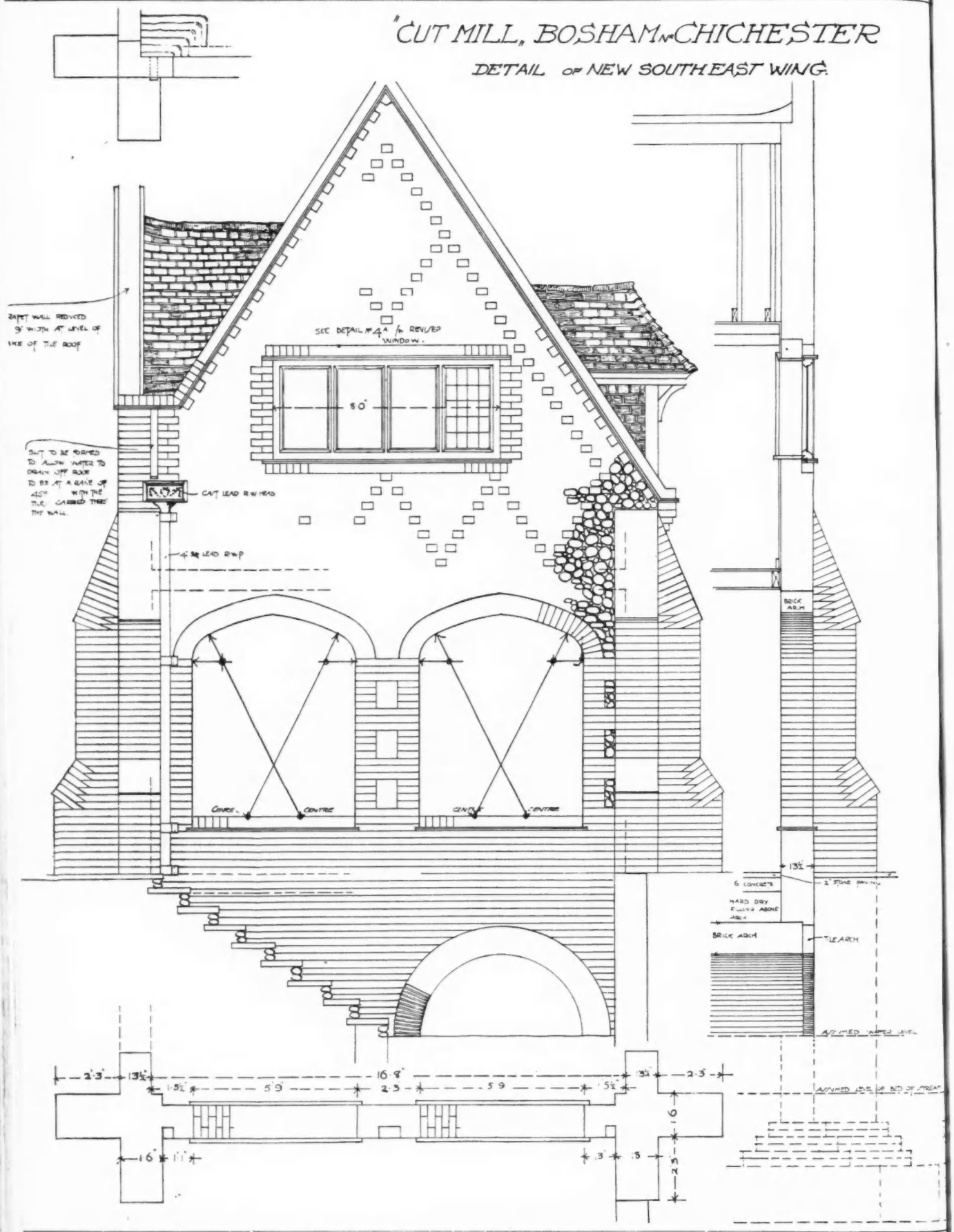


NEW WING AND ARCADED LOGGIA AT CUT MILL, BOSHAM, HAMPSHIRE

By DARCY BRADDELL AND HUMPHREY DEANE

THE design for the end of the new wing illustrated here was largely influenced by the fact that a disused mill-stream turned the whole site into an island. The stream was fed from a canal or "cut" at a higher level, which turned the mill wheel, and then went to sea. When the new wing was built for Captain and Mrs. H. M. Harwood, it was sited right over the mill-stream, and so it became necessary to provide a way round the end of it into the garden which lay at the back. This was effected by making the end of the wing into an open arcaded loggia. This bridged over the stream and at the same time acted as a support to Mrs. Harwood's writing-room above, which has a lovely view down the stream and over the waters of Bosham Harbour.

The materials used are flint, dressed with red brick, and the roof is tiled. All the tiles were old ones, taken off a dilapidated shanty that stood on the site, and most of the bricks, too, are old. For working drawing, see overleaf.



Darcy Braddell and Humphrey Deane.]

[*For photograph see previous*



WEDNESDAY, FEBRUARY 5, 1930

THE MODERN DON QUIXOTE

"Behold! a giant am I,
Aloft here in my tower."

—LONGFELLOW

SENTIMENT for the preservation of things obsolete clings tenaciously, and has been known to put up a winning fight even against common-sense and logic. As Astragal records in this week's issue, the interest in old windmills, largely aroused by press correspondence, has resulted in a concerted movement to preserve at least some of the more picturesque of these structures still existing in Great Britain. It is not amiss, therefore, to examine the motive on which such activities are based.

Is the object to prevent the untimely decay of something useful; to preserve something which has an instructional and educative value for future generations; or to retain a feature of beauty on our landscapes?

It would be unkind to suggest the existence of a reactionary sentiment which clings to anything old (and even ugly) as a protest against the rate of modern progress. Is the disuse of the old-fashioned windmill, then, untimely? Reason says it is not, or it would not have occurred. It is quite correct to maintain, as some protagonists do, that the windmill is still the cheapest form of power producer, since the source of the power is free and the mechanism necessary is simple. Yet are we compelled to admit that in its old form it is not efficient, in that the return in power obtained is inadequate for the cost of construction and maintenance. Also, the day has gone when the conditions of life permitted man to wait calmly and patiently on the vagaries of the wind in order to carry on his work.

So far as instructional value is concerned, it is doubtful whether the old windmill stands for anything, save an example of what to avoid in aero-dynamics. There is left, then, the question of beauty; but is the old windmill a thing of beauty? Well—yes, sometimes! Beauty in such matters is largely a question of association; and in the abstract, divested of their environment, many things are merely curious that once seemed beautiful. It is questionable whether the associations which made the old windmill beautiful will survive the next generation or two.

If the picturesqueness of the windmill demands that it be preserved, then let us see that it is preserved complete and as an operating mechanism. There is something morbid about the habit of clinging to the dilapidated remnants of things we have outgrown. When utility has ceased and beauty has been destroyed by the inroads of time and weather, such things become merely objects of aimless curiosity.

It may be incongruous to associate the old and the modern (though that is a normal procedure in all progress), but if the old windmill has a real artistic value let us retain its general form, but call in the aid of modern aero-dynamics to modify it to do its work efficiently. The electric generating station has, like a modern Quixote, tilted destructively against the windmill, but without destroying it as a potential power producer. Wind power has been the subject of considerable engineering progress of late years, but even the modern wind motor is only a step on the way.

It is not difficult for anyone who has watched the development of aircraft propeller design to visualize a big development in the future, in which self-regulating aerofoils will take the place of the old mill sails or "swifts" and tap nature's vast wind power supply far more effectively. The electrical and mechanical engineer will each contribute a share to the scheme for harnessing, converting and storing a little of this vagrant energy, and so place at the disposal of man a force which at present "bloweth where it listeth," often to man's distress rather than his comfort. The only section of the problem that has not yet been solved economically is that of power storage, so that an erratic supply may be converted to a regular one. Even this is not essential to the effective use of a modern windmill for water pumping.

Would it please our preservation societies to see every country house equipped with its windmill, almost a replica of the old type, operating an electric storage plant? This would meet the claims of utility and beauty alike, though resuscitation of the windmill to economic utility would probably rob it of interest to many who now sentimentalize over it. Still, that may happen.



LONDON'S HIGHEST COMMERCIAL BUILDING [*By J. J. Joass.*

Royal London House, to be opened today by the Lord Mayor of London.
Further illustrations and descriptive notes appear on pages 234 to 240.

NEWS & TOPICS

THE ABBEY SACRISTY: COUNTER-ARGUMENTS

THE Dean and Chapter of Westminster Abbey are displaying reluctance to adopt the recommendations of the Advisory Committee on the question of the Sacristy, and it looks as if efforts are being made to prepare public opinion for a possible rejection of the scheme advocated by the Committee. Yet the counter-arguments advanced are not convincing. Writing in *The Morning Post* last week, Mr. Reginald Grundy contended that the proposed Sacristy on what is known as the Poets' Corner site would mask the Chapels of St. Edmund, St. Thomas the Martyr, and St. Benedict by a permanent masonry structure. In reply, it may be pointed out that the Sacristy on this site need not come up to the level of the bases of the windows, being in fact not as high as the tall plinth of the chapels. The very existence of such a Sacristy would not be suspected by anybody who looked at the Abbey from the direction of Parliament, and could in fact only be seen by those traversing the narrow yard near the Poets' Corner entrance. If it be insisted upon that the Sacristy or part of it should be on ground level, no more inconspicuous place could have been chosen than the Poets' Corner site. In comparison with this modest little building, which would nestle between the buttresses at a part of the Abbey invisible from any vehicular thoroughfare, the Sacristy as originally proposed would be highly obtrusive; and if the Dean and Chapter should decline to adopt the Poets' Corner site on the ground that it would obstruct the view of the Abbey they are indeed straining at a gnat, having previously displayed a great eagerness to swallow a camel.

★

Another argument employed to discredit the scheme recommended by the Advisory Committee is that the structure of the Abbey might be endangered by the projected cutting of a passage through the 17 ft. of masonry on the north side of the Chapter House crypt. But surely this is the twentieth century, and what our mediæval forefathers might have hesitated to attempt, architects and engineers of today could carry out with perfect safety. At any rate, the question should be put to expert constructors to decide whether the difficulties attendant upon cutting the proposed passage are or are not insurmountable.



The windmill at Haverhill, Suffolk, now for disposal, is unique in possessing a fifty-foot iron vane-wheel.

★

The third objection, that the Committee's scheme would necessitate the removal of the monument to John Dryden and involve the enlargement of a thirteenth-century doorway in the south wall of the chapel of St. Benedict, carries a little more weight. It may be remembered, however, that the scheme for the utilization of the Poets' Corner site, as proposed by Mr. Trystan Edwards and illustrated in THE ARCHITECTS' JOURNAL for December 4, 1929, showed how a covered entrance to the Abbey from the Sacristy could be achieved, without piercing the walls of St. Edmund's Chapel or disturbing any of the monuments at the Poets' Corner, by the simple method of planning a covered lobby which would unite the entrance to the Sacristy with the doorway to the south transept. The altar frontals and other ecclesiastical objects which could with difficulty be taken up and down stairs could be stored in the Sacristy and taken into the Abbey by the existing entrance. The crypt of the Chapter House would provide a larger area in which some of the other functions of the Sacristy could be discharged. This is perhaps not the perfect, the ideal scheme, but can the Dean and Chapter suggest a better?



Looking upwards at the sails of the Union Mill, at Cranbrook, Kent, built in 1814 by Henry Dobell. It is still in use, but threatened.

WINDMILLS AS NATIONAL MONUMENTS

The Society for the Protection of Ancient Buildings has intimated its wish to compile a record, with photographs, of all the windmills still standing in the British Isles, and eventually to write a book on the subject. It also hopes to raise a fund so that a few carefully selected mills in different parts of the country can be repaired and kept as national monuments. The cost of repairing a mill is very large, and

there are few millers who can earn enough today to undertake such expensive repairs. So one by one the windmills close down—a fate which is imminent in regard to the Union Mill, Cranbrook, here illustrated—and almost always they are sold for the price of the timbers, or else allowed to rot until they fall. Two or three fine mills now on the market are threatened with destruction. Such is the case of that at Haverhill in Suffolk, also illustrated. It is the only one in England having a circular iron wheel instead of the ordinary sails, and is an eight-storied tower mill, 70 ft. high, built in the late sixties by one Ruffle, grandfather of the present owner. The wheel is 50 ft. in diameter, and has 120 vanes each 5 ft. long and 1 ft. wide. Two other mills with somewhat similar wheels were built about the same time, but neither of these exists now.

★

The moving of a windmill from one place to another was at one time fairly common. The third illustration shows the removal of a mill in 1797 from the present site of the Bedford Hotel in Brighton, to Dyke Road, a distance of four or five miles. It was dragged over the Downs by 86 oxen, two being kept in reserve. The older of the two mills still standing on the South Downs at Clayton, and familiar to users of the London-Brighton road, was moved there from Preston. They tried to drag it up the hill with horses, but broke the tackle time and again, because the horses "snatched," so oxen were substituted and with their steadier pull the mill was drawn to its new site without further difficulty. Tradition has it that elsewhere two mills stood side by side on a hill until the miller came to the conclusion that there was not enough wind to work both the mills so close together. One of them was therefore moved to the other side of the hill, where it could have the undivided attention of the wind.

A LEAD FROM THE CITY CORPORATION

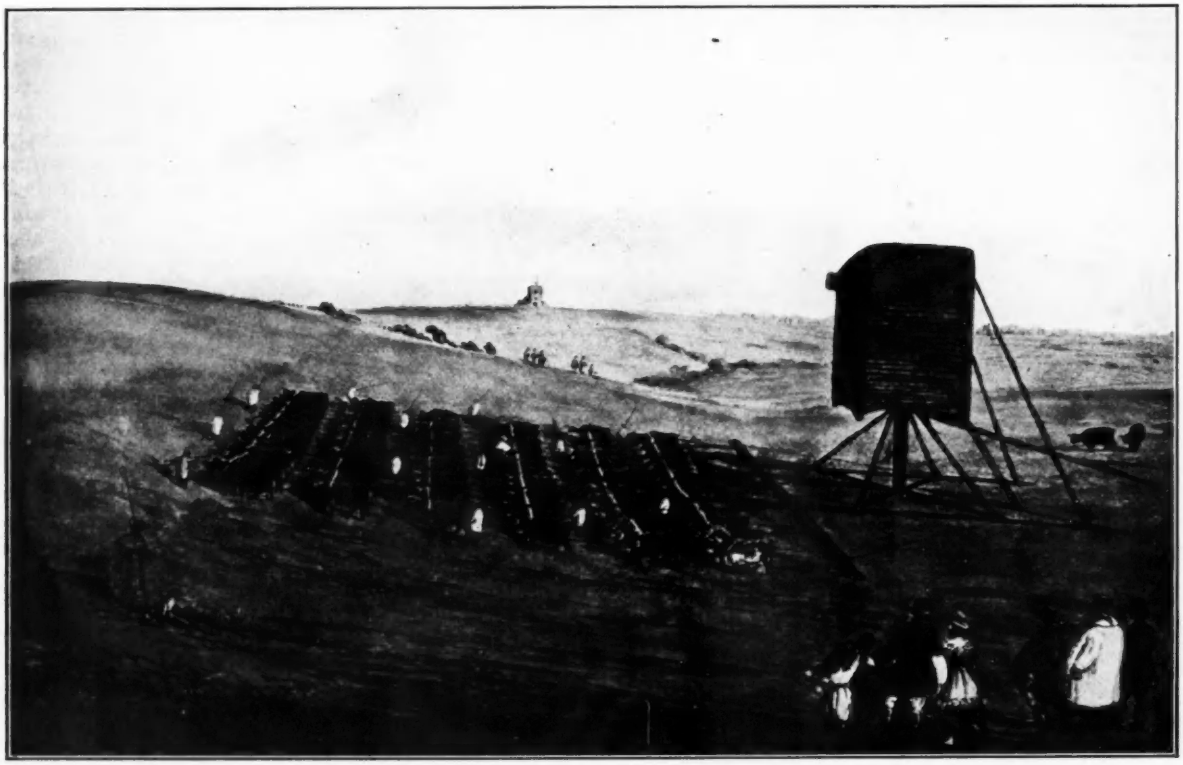
The following resolution, which Mr. William Foxton is to move at tomorrow's meeting of the City of London Corporation, is worth quoting at length :

"In order to harmonize and bring into effective relationship any work, or the acquirement of any specific article in which design, form, colour, fitness and artistic merit is an important consideration in connection with the activities of the Corporation, and to remove the chaotic policy now existing, it be referred to the Special Committee to consider and report as to the best means of dealing with such matters in the future."

I wish this brave resolution the success it deserves and more consideration than it may hope to get. Its adoption might well lead the wealthy city back to the days when it acquired, as a matter of course, objects now regarded as above price.

BUNGALOID BREAKFASTS

Colonel Bressey, principal technical officer to the Ministry of Transport, has discovered what I believe to be an "original" first cause of the development of bungaloid growths, ribbon-wise, along our arterial roads. "Cookery," he says, "is the fundamental question which dictates the form assumed by all suburban development"; and goes on to paint an idyllic picture of dwellings grouped about a central green, with a communal dining-room and cookhouse, were the principle of individual kitchens to become susceptible of sacrifice. It may well be so, but as long as the Englishman's home is his castle—and perhaps that time is, indeed, passing—I do not see him going "out" for his breakfast. ASTRAGAL



Removing a windmill, across the South Downs, by means of a team of over eighty oxen ; a frequent incident a century ago.



[*From* Spanish Missions of the Old South-West.

The Mission of San Xavier del Bac, Arizona, as it is today, viewed from the south.

SPANISH MISSIONS IN S.W. AMERICA

BY L. F. EDWARDS

THE ruins of the Spanish missions of the south-western States of the American Union—Texas, New Mexico, Arizona, and California—represent all that is left of the greatest spiritual development of architecture on that material continent. Alone among the architectural developments of the New World—with the possible exception of the religious architecture of the pre-Columbian peoples—the Spanish missionary churches bear the stamp of an intense spiritual fervour and, although varying almost universally in detail and even in general design, they have all, nevertheless, about them the influence of the land of their creators and still more of their faith.

Present-day America (the United States, that is) in search of its ancient national heritage, having exhausted the colonial tradition—the traditions of the days of the covered wagon and the Mississippi steamboat, and the traditions of the War of Independence—is now searching farther with commendable insight and genuine reverence into the work of its Spanish predecessors; and the more light modern interest and research throws upon their activities the more Protestant and Anglo-Saxon America is bound to admire them.

This interest, however, this reverence have come almost too late. Indian revolts at the close of the seventeenth century, Mexican disestablishment and persecution in the nineteenth, and the roving Ford-carried souvenir-hunter of the early twentieth have left of most of these fine old churches but a heap of ruins. Earthquakes have damaged many that man has spared.

Some score or so, however, have survived; many because they are even now still in use as parish churches; and their beauty and suitability to the hot, dusty, arid climate of the south-west have drawn the attention of American architects to them and have developed a new style of domestic architecture, particularly in California, adapted from the spacious living-rooms and cool, closed gardens of the missions—a school of architecture of which the modern examples are far better known and admired in this country than the originals from which their design was taken.

These churches were built, as a rule, of adobe brick by convert labour, under the direction of the missionary-priest in charge of the district, who was not generally an architect, and merely adapted the design that he considered most suitable and familiar for a church, school, living quarters, and, inevitably, a closed garden, often cloistered. They therefore differ widely in detail, and naturally enough many of them are strongly reminiscent of Mauro-Spanish work. Others, perhaps the most interesting group, in the New Mexico district, have been strongly influenced by the architecture of the Pueblo Indian buildings; and this Pueblo-Mission style is beginning to exert the same influence on modern domestic architecture, in Arizona and New Mexico, as the Spanish-Mission style has already done in California.

Naturally enough, also, these fervent but uninstructed architects did not always build solidly or craftily; and so, although the dry climate of the south-west is in itself a preservative (mummied bodies of the Pueblo Indians having been preserved in caves for thousands of years), neglect, exposure, occasional storms, earthquakes, and frequent pillagers are gradually destroying them. Some, like the Tumacacori and Los Angeles de Guevavi, are mere heaps of sun-dried brick. Still others, for example San Fernando in Texas, San Luis Obispo de Tolosa and Santa Clara de Asís in California, have been almost as irreparably destroyed by the earnest efforts of misguided "renovators." The New Mexico missions, having been in



The Mission of San Juan Capistrano, California, now in ruins, showing the old garden. A walled-in garden was an indispensable adjunct to the mission stations of the south-west.

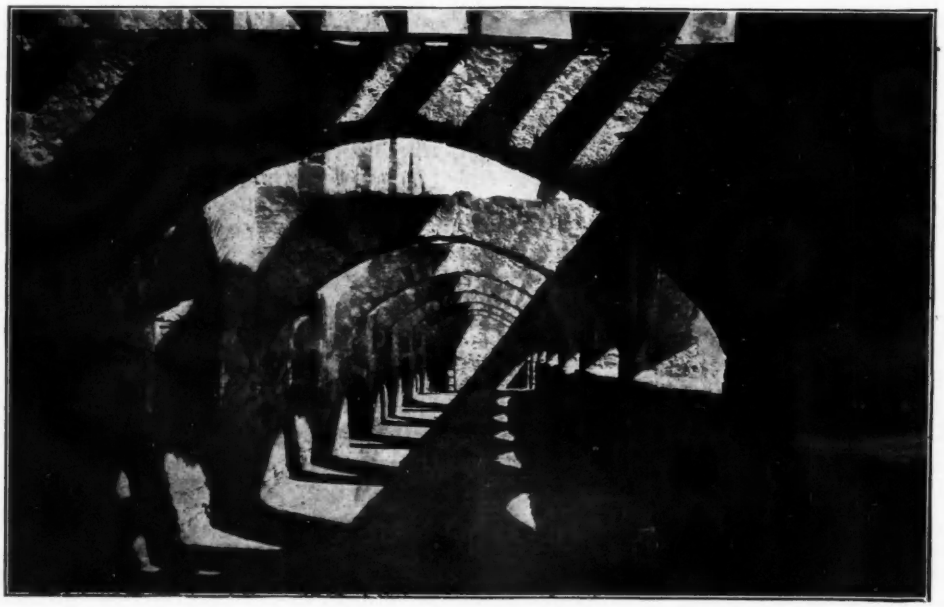
[*From* Spanish Missions of the Old South-West.

almost continuous use as parish churches, have mostly survived.

As a rule the churches themselves were severe in style, the greatest ornamentation being devoted to the campanile, which is a marked feature of all mission architecture, and cruciform in shape, although the miscellaneous outbuildings often obscure this fact from the outside. Lighting, as a rule, was from the top, windows being few and small. For interior decoration the missions relied largely on the work of talented Indian converts, although, in Texas, the famous Spanish artist Huisar did some fine work. Occasionally, fine paintings were brought from Europe, including several Murillos, an original Cimabue—"The Annunciation," and Rafael's "St. Michael and Lucifer," both these last in the San Miguel Chapel at Santa Fé.

For defence, all the principal mission buildings, the church, baptistery, mortuary, storehouses, school, etc., together with the beautiful mission garden, were enclosed within a high patio wall; the "visitas," or occasional chapels served from the missions, were undefended. Most of the mission gardens have disappeared, the finest remaining being those of San Juan Capistrano and Santa Barbara, in California, into the latter of which no woman may enter save a reigning queen or the wife of the President of the United States. It was badly damaged two years ago by earthquake.

One cannot leave the subject of the south-west missions without a reference to the Archæological and Historical Museum at Santa Fé, New Mexico. This museum, dedicated in 1917, is a composite of six of the old mission churches—the San Estevan, the San Felipe, the San Buenaventura, the Laguna, and the Pecos—blended together to make an harmonious whole.



Cloister arches of the San José de Aguayo Mission, Texas, one of the only two in the entire south-western territories having two-story cloisters, and the finest building in this State.

[*From* Spanish Missions of the Old South-West.



The interior of the Buenaventura Mission, California. The early-nineteenth-century building has been renovated out of recognition; the ceiling is a modern innovation.

[*From* Spanish Missions of the Old South-West.

In it is housed a wealth of Indian work and relics collected from the missions and the pueblos, and it will not only suitably commemorate the lives and sacrifices of these fratres and their converts, but will perpetuate their beautiful and original architectural style long after their own churches have inevitably crumbled to dust.

In probably the most beautiful book published in the last few years—and, incidentally, a mine of information on the Spanish missions and the Spanish Fathers—Miss Willa Cather, in *Death Comes to the Archbishop*, speaks of the Acoma pueblo church, built on the top of the 400-ft. precipitous Acoma mesa:—

". . . It was built early in sixteen hundred, by Fray Juan Ramirez, a great missionary, who laboured on the Rock of Acoma for twenty years or more. . . . It was Father Ramirez, too, who made the mule trail down the other side—the only path by which a burro can ascend the mesa, and which is still called *El Camino del Padre*.

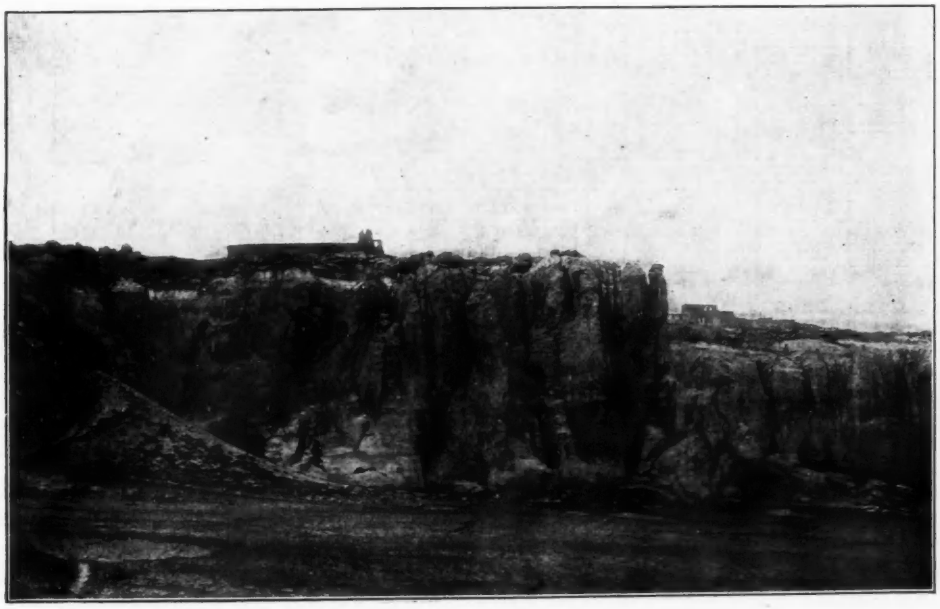
". . . Every stone in that structure, every handful of earth in those many thousand pounds of adobe, was carried up the trail on the backs of men and boys and women. And the great carved beams of the roof—Father Latour looked at them with amazement. In all the plain through which he had come he had seen no trees but a few stunted pinons. He asked Jacinto where those huge timbers could have been found.

" ' San Mateo mountain, I guess.'

" ' But the San Mateo mountains must be forty or fifty miles away. How could they bring such timbers? '

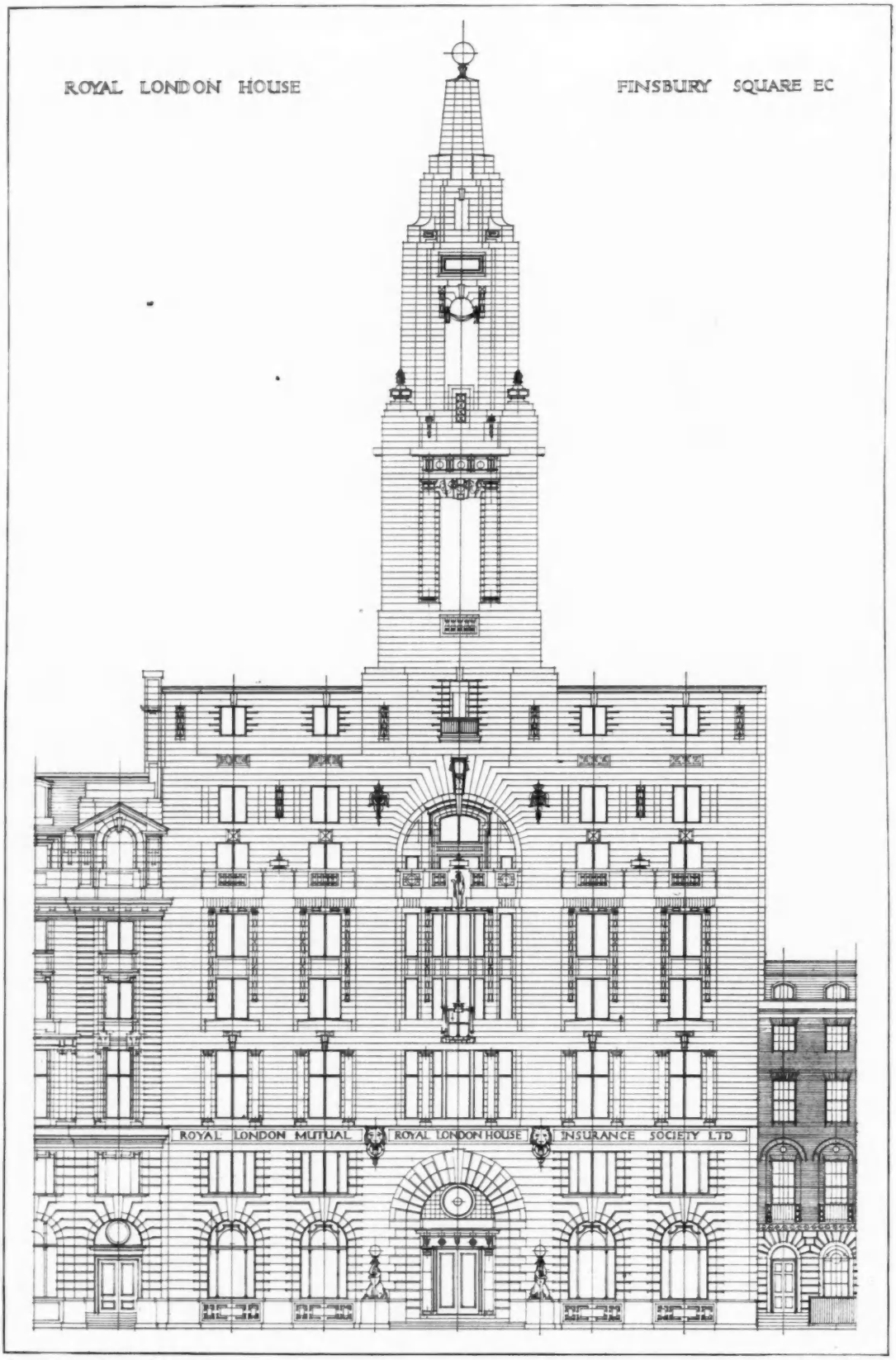
" Jacinto shrugged. ' Acomas carry.' Certainly there was no other explanation."

Spanish Missions of the Old South-West. By Cleve Hallenbeck. London: William Heinemann, Ltd.



The Acoma mesa, New Mexico, showing the church and, to the right, a portion of the pueblo. The mesa is a hundred acres in extent, and has precipitous sides 400 ft. high.

[*From* Spanish Missions of the Old South-West.



Royal London House, E.C.] [*By J. J. Joass.*

The architect's drawing of the principal elevation to Finsbury Square. The building forms the first section of the new headquarters of the Royal London Mutual Insurance Society. When completed the Society's premises will occupy the whole of the north side of the Square.



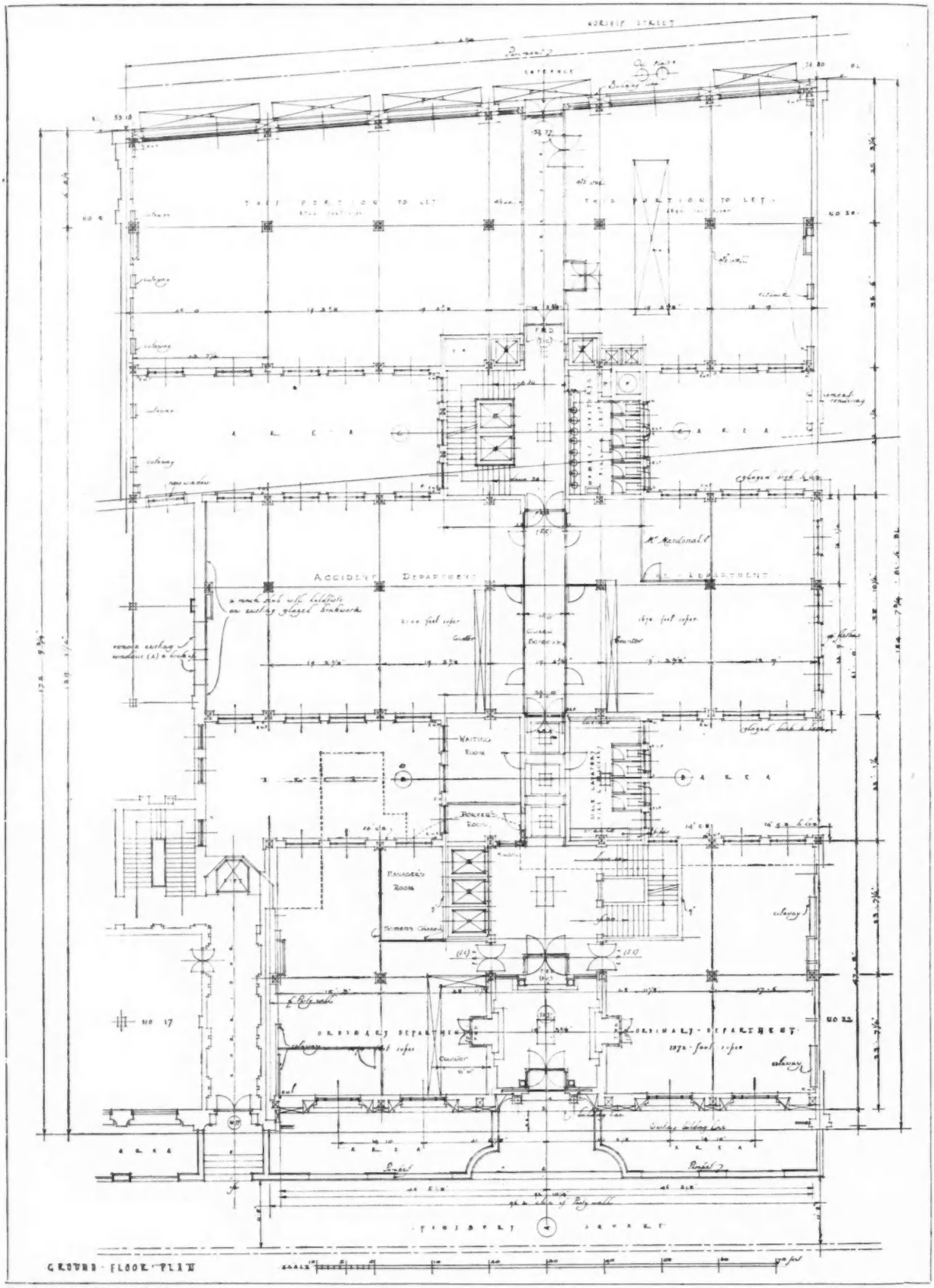
A view of the main façade, looking up from the roadway in Finsbury Square towards the tower, which is crowned by a figure representing Mercury, the God of Prudence. The total height of the building from the basement floor to the top of the tower is 250 feet.

ROYAL LONDON HOUSE

DESIGNED BY J. J. JOASS

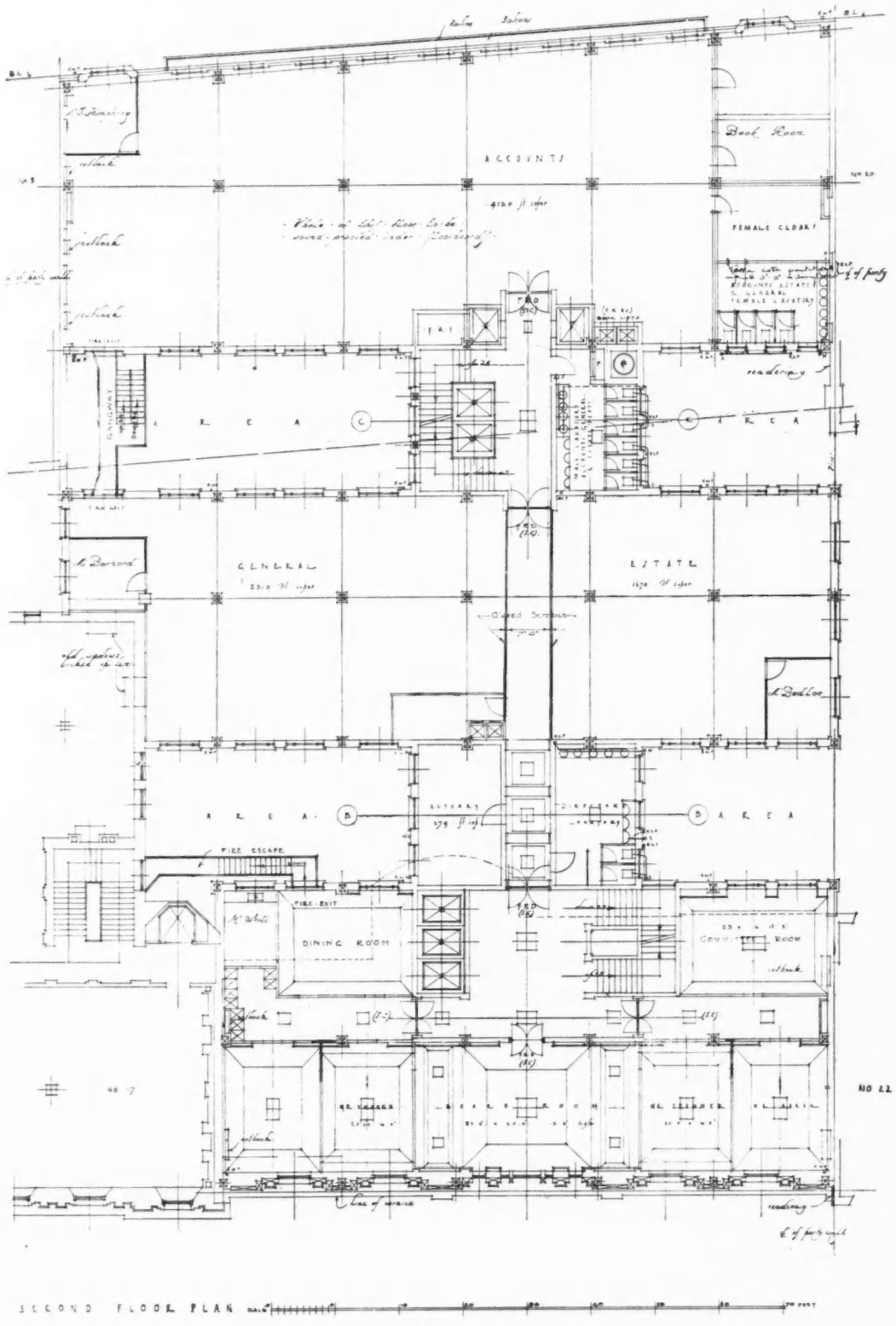
TODAY, February 5, the Lord Mayor of London will formally open the first section of the new headquarters of the Royal London Mutual Insurance Society in Finsbury Square, E.C. Building work has been in progress for two years. The building now completed extends from Finsbury Square to Worship Street, and presents several unique features which are remarkable even among the giant structures now arising in London.

In the first place, it is the highest commercial building in London. The top of the tower is 250 ft. above the



Royal London House, E.C.] [*By J. J. Joass*

Ground-floor plan. There are two entrances to the building, one from Finsbury Square, on the main front, the other from Worship Street at the rear. The former leads through an entrance-hall, built and roofed in solid marble, to the main staircase; the latter to a subsidiary staircase. There are twelve lifts.



Royal London House, E.C.] [*By J. J. Joass*

On the second floor is the directors' suite, planned on the main front, and including a boardroom, a committee room, directors' rooms, and a private dining-room. Photographs of two of these rooms appear on page 240. A restaurant and recreation rooms for the staff are provided on the seventh floor.

basement floor, and is surmounted by a figure of Mercury, the God of Prudence. This figure was exhibited in the Royal Academy this year, and was much admired by the critics. The roof of the main structure is 125 ft. above the basement floor, and that of the centre block 135 ft.

Internally, the building provides 150,000 sq. ft. of floor space, equal to $3\frac{1}{2}$ acres; and an occupant of a room in the highest floor can reach the entrance in less than two minutes, owing to the efficiency of the lifts, of which there are twelve. With the exception of the marble which is Travertine, the whole of the materials used in the construction of the building are British. In the entrance hall the walls are not marble-lined, as is customary in commercial buildings, but they are built, and the ceiling is vaulted, in solid blocks of marble of great thickness. The bronzework in the entrance hall is also of massive construction. The main front doors weigh two tons, and

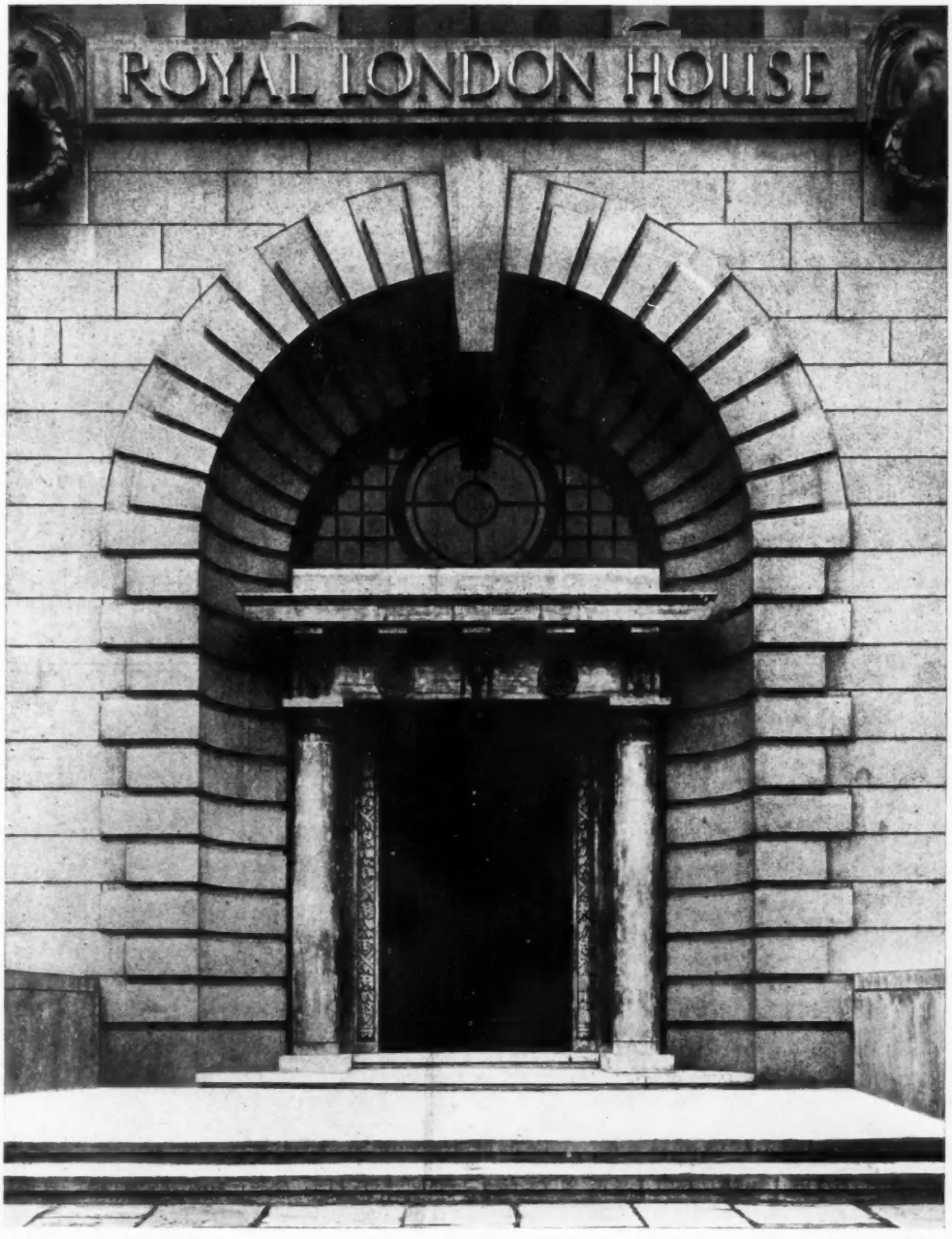


Royal London House, E.C.] [*By J. J. Joass.*

A view of the tower, looking up from the roof of the main building, 135 ft. above basement floor level, towards the figure of Mercury. The entire building, including the tower, will be floodlit at night, and provide London with a new landmark, visible from the suburbs and surrounding country.

are finished with an antique green surface, as in the ancient Roman examples.

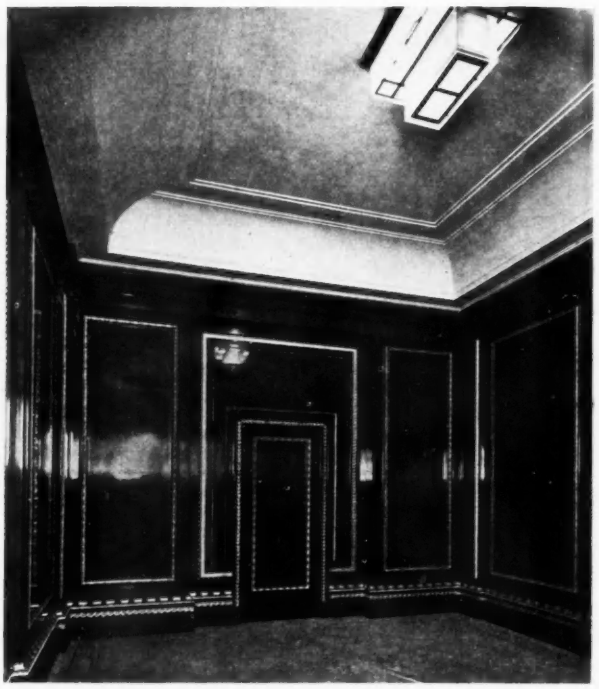
Every means have been adopted to increase the efficiency and health of the occupants, including the installation of an apparatus for supplying ozone to every room, and the glazing of all the windows with vita glass. Warming is by radiation from the walls and ceilings, effected by twenty-three miles of embedded pipes; and water is obtained from artesian wells, 250 ft. deep. The office equipment is entirely of enamelled steel. The electric light fittings are of translucent glass and bronze. They are of British design and workmanship, and are equal, if not superior, to the finest productions of the French. They are designed on a new basis, and comprise a series of pressed glass pelmets, with glass soffits, repeating the forms and planes of the ceilings and walls. In fact, the fittings in the main rooms resemble a reversed coffered ceiling in glass.



Royal London House, E.C.] [*By J. J. Joass.*

The main entrance doorway from Finsbury Square. The doors are of bronze, and weigh two tons. They are in two halves, each sliding back into the reveal, as shown on the ground-floor plan reproduced on page 236. Beyond these doors is a small bronze vestibule, with bronze swing doors leading to the entrance hall.





The committee room and a director's room, of which there are four. They are panelled in Cuba mahogany, with decoration in gold leaf, and have oak parquet floors, with walnut borders. The committee room will be fitted with stained-glass windows. Some of these are shown in the photograph.





Royal London House, E.C.] *By J. J. Joass.*

The main staircase; and a detail of the principal corridor on the second floor. The staircase balustrade is of bronze from ground to second floor, and above of cast iron, with bronze handrails. Walls and floors of the landings and corridors are of marble. The walls of the staircase are of marble; the stairs of composition. The door, with the semicircular fanlight, is of teak.

BIRMINGHAM HOSPITALS CENTRE, EDGBASTON

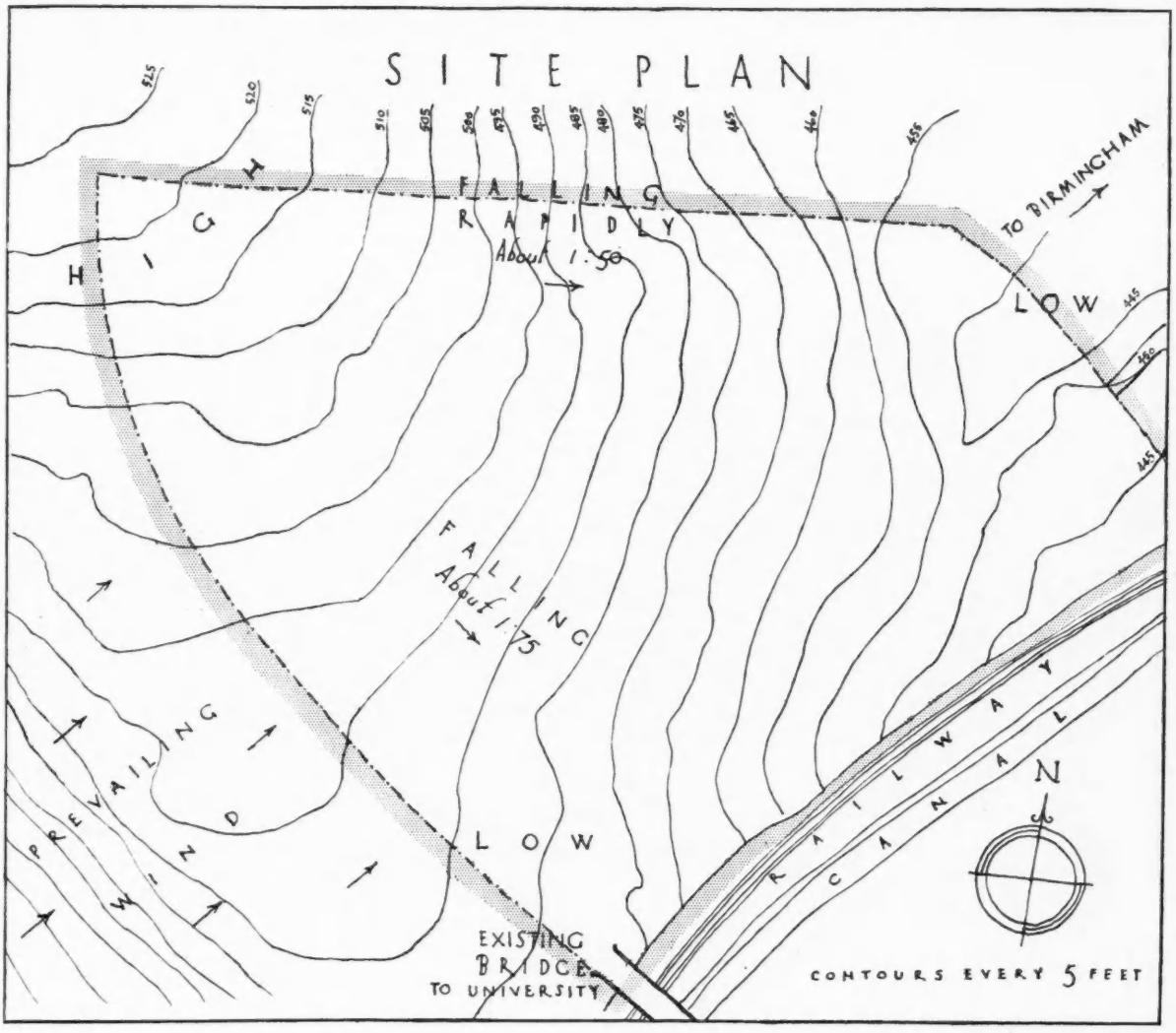
Some Deductions from the Plans of the Placed Competitors

BY E. MAXWELL FRY

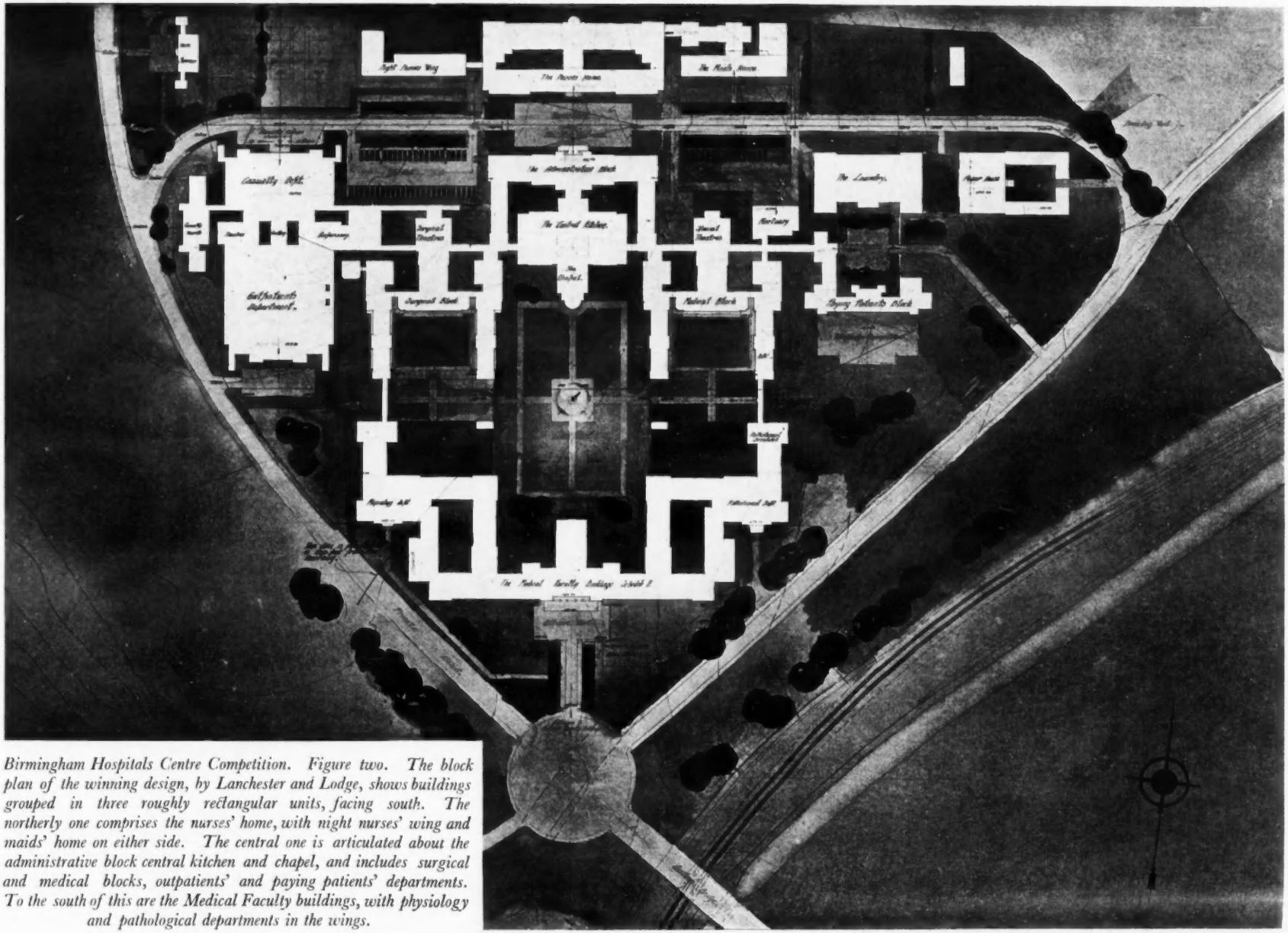
Of all the subjects for competitions, a hospital may be considered the most important. Moreover, by its mere size—the scheme is estimated to cost £1,000,000—that to be discussed below, and further next week, must command attention. As it happens, this competition, the result of which was announced in last week's issue, has been exceptionally productive of ideas meriting the closest study.

THE amount of building involved in this great hospital design, if measured only by the superficial area it covers, must place it among the largest of its kind. When its magnitude is further stressed by the vertical expansion of six stories, the scheme takes on the dimensions of a small town, with this difference, that where a town is a largely decentralized and diffuse organism, this pulsates with the nervous, circulatory and respiratory systems of a highly centralized organization.

The judging of a competition limited to twelve architectural firms of high standing and specialized knowledge is by its nature a matter for long and detailed examination—an examination so much more minute than is possible to the outside observer, that I do not propose to attempt to do more than



Birmingham Hospitals Centre Competition. Figure one. Sketch plan of the bare site, with contour lines indicated, to illustrate the problems set by the physical conditions.



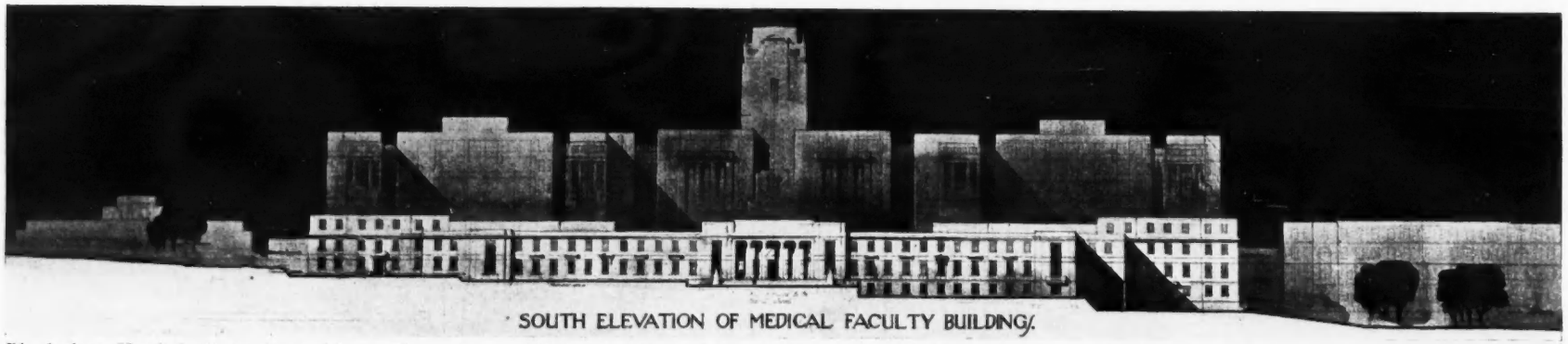
Birmingham Hospitals Centre Competition. Figure two. The block plan of the winning design, by Lanchester and Lodge, shows buildings grouped in three roughly rectangular units, facing south. The northerly one comprises the nurses' home, with night nurses' wing and maids' home on either side. The central one is articulated about the administrative block central kitchen and chapel, and includes surgical and medical blocks, outpatients' and paying patients' departments. To the south of this are the Medical Faculty buildings, with physiology and pathological departments in the wings.

and pathological departments in the wings.



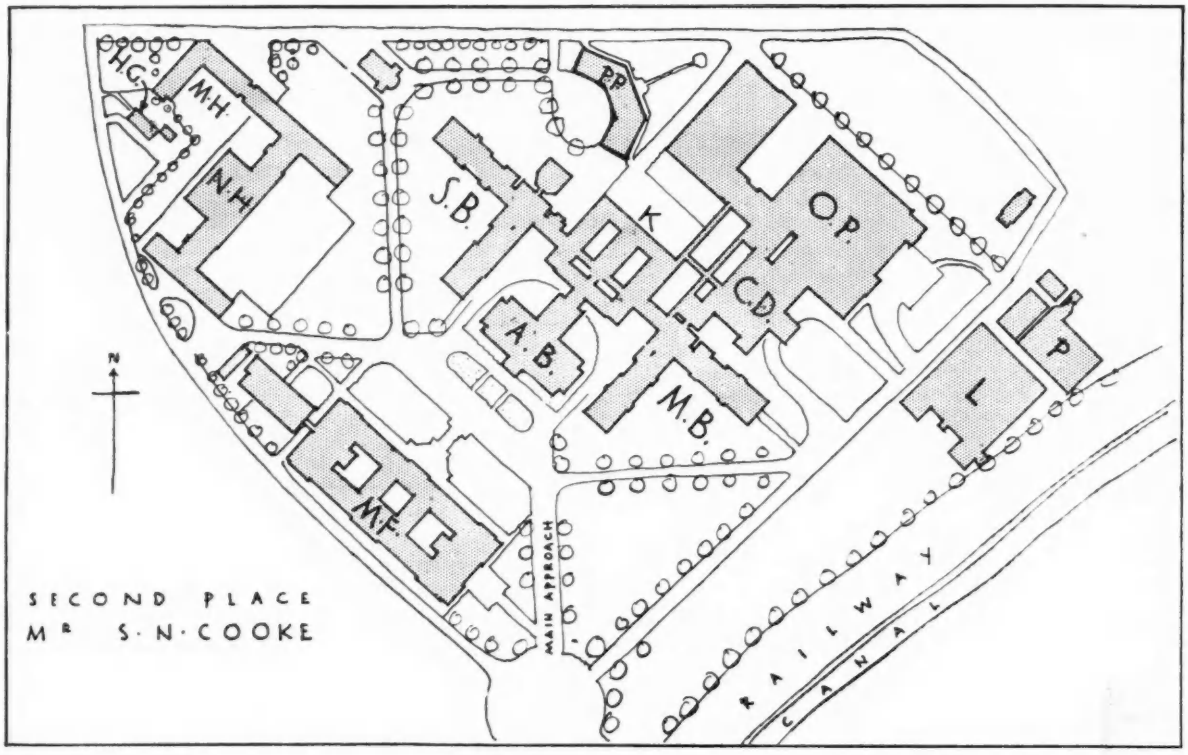
SOUTH ELEVATION OF HOSPITAL.

Birmingham Hospitals Centre Competition. Figure three. Hospital elevation of the winning design, by Lanchester and Lodge. The elevation serves to prove how the great mass of the buildings overcomes the natural rise of the ground. This aspect, taken across the courtyard immediately south of the main hospital block, shows levels dropping across from left to right. On the left are out-patients' and casualty departments, single-storied buildings ; and on the right the paying patients' block, rising to several stories, so as to make an effective balance of weight. This balance is achieved with no loss to the full working of the scheme, for by taking the out-patients' and casualty departments on the high land a system that resembles the "gravity feed" system of a modern factory enables corridors to lead away from these blocks, where patients are admitted and examined, to reach the ground and first floors of the medical and surgical blocks, with a slight ramp down in the one case and up in the other, but without stairs to either. It should be noticed that the gardens, shown on section immediately in front of the hospital block, are immune from any but foot traffic, and may be used for recreational purposes by the medical staff, or by convalescing patients. Apart from these obvious uses, they will provide a very pleasant green foreground, out of sight and hearing from the main traffic of the hospital, the arrival of ambulances, and the passage to and fro of crowds of people. It is something of an achievement to have produced such a quiet and ordered open space in the midst of such complicated problems.



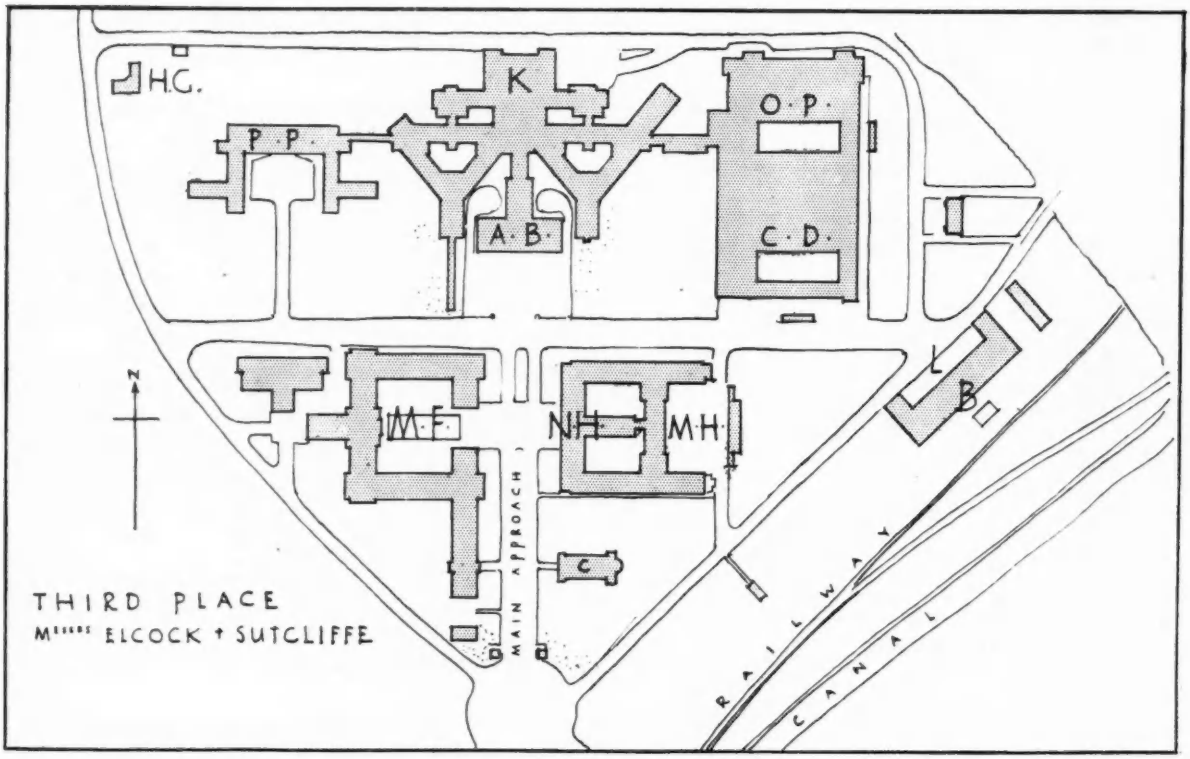
SOUTH ELEVATION OF MEDICAL FACULTY BUILDING.

Birmingham Hospitals Centre Competition. Figure four. Medical Faculty Building elevation of the winning design, by Lanchester and Lodge. This inclusive elevation shows the Medical Faculty buildings lying on low ground in front of the main hospital block. These buildings are quite low and have only been allowed to block what might have been the main axis of the administrative block of the hospital because there will be an effective visual axis over the top of the buildings to the tower of the administrative block and its flanking masses. The whole range of buildings will be visible from the entrance near the railway bridge, but as it is obvious that there must be many entrances to a hospital, and that a single great approach would be used by few of the many who have business there, the first glimpse of the whole scheme must be allowed to take the place of the grand approach, and the road divided to lead directly to the many departments into which the hospital is partitioned. On the far side of the scheme, where the circulatory roadway reaches the entrance to the administrative block, there is a restatement of symmetry, and an echo of what was visible for a moment at the entrance gate. It is difficult to imagine now the effect that this mass of buildings is to produce on the observer when it is completed. It has all the appearance of a large mountain range, scarred by deep fissures, where the light courts separate blocks of wards, the tower a peak, and the Medical Faculty buildings a foothill lying in the plain below.

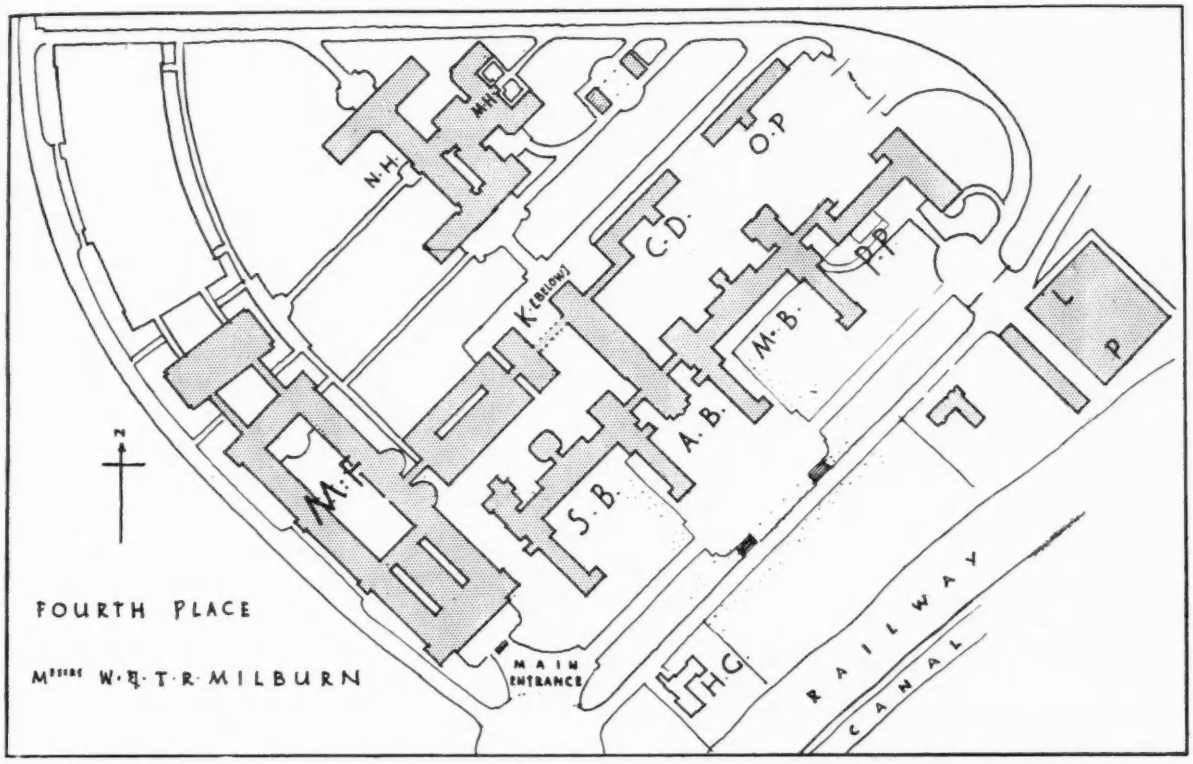


A.B. = Administrative Block
C.D. = Casualty Department
H.G. = House for Governors, etc.
K. = Kitchens
L. = Laundry
M.B. = Medical Block
M.F. = Medical Faculty Building

KEY TO THE

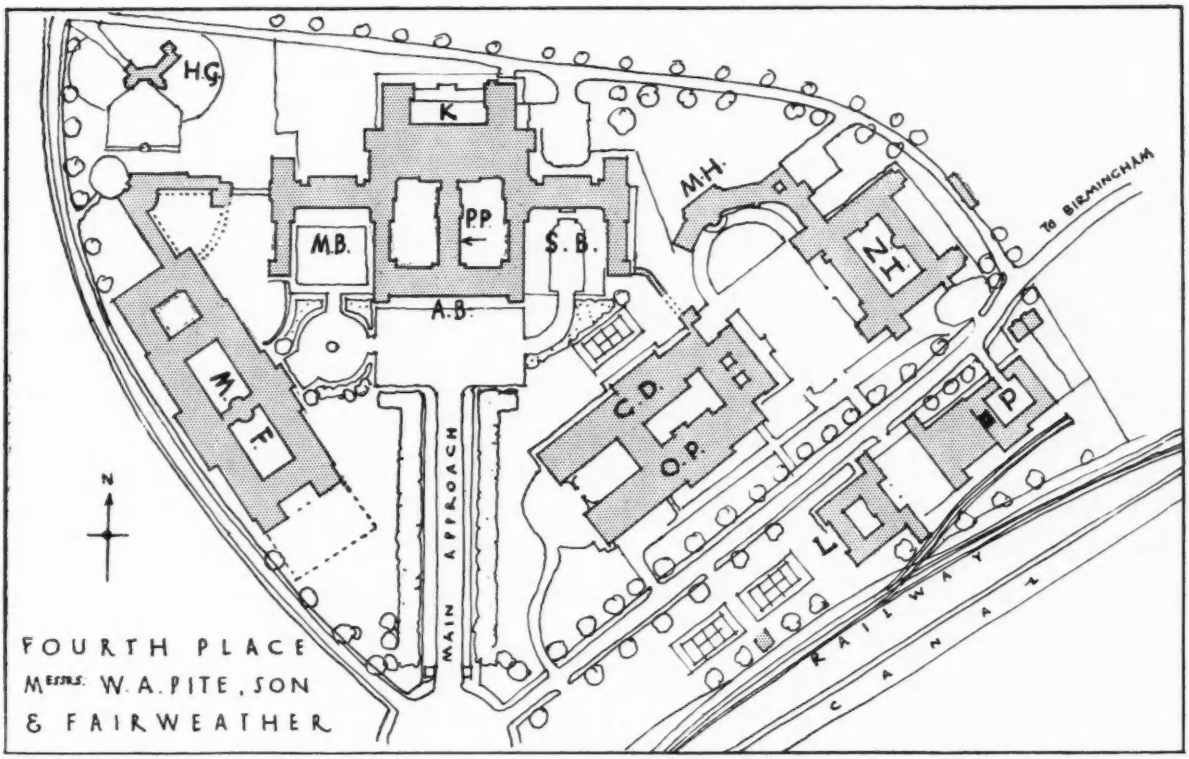


Birmingham Hospitals Centre Competition. Figures five and six. The designs placed second and third.



M.H.= Maids' Home
N.H.= Nurses' Home
O.D.= Out-patients' Department
P. = Power House and Workshops
P.P.= Paying Patients' Department
S.B.= Surgical Block

ABBREVIATIONS



Birmingham Hospitals Centre Competition. Figures seven and eight. The two designs placed equal fourth.

seek to enumerate, in as vivid language as I may find, the larger problems that were presented to the competitors by the site and programme, and the manner in which these found solution in the brilliant design of the winners, Messrs. Lanchester and Lodge.

THE SITE

As will be seen from the diagram (figure one) the site is on ground that rises fairly rapidly in the north and more gently in the south. The slope is across the site, roughly from west to east, and will be seen later to be capable of a vital bearing on the problem.

A railway and canal pass from S.W. to N.E. as one of the fixed boundaries of the scheme, and there is access by an existing bridge over both from the University, which lies at walking distance in the direction of Birmingham. A further road, either existing or proposed (I do not know which), meets the site somewhere at its N.E. end. The centre of Birmingham is some miles away, but trams pass about three-quarters of a mile distant, on the main Bristol Road.

The prevailing wind is indicated as being south-westerly; and the north point should be noted.

DEDUCTIONS FROM CONDITIONS OF THE SITE

I do not want it to be thought that the following deductions fly to the mind on seeing an empty site. They do not. But some of them have affected the various designs, and all of them the winning design.

First : The low ground calls for the power-house, because of the returns to boilers. This choice is reinforced by the south-westerly wind which will blow the smoke off the site.

Second : The Medical Faculty (a knowledge of the various buildings required must be presupposed) should be within walking distance of the University, and should not occupy the high land, which is needed for the hospital proper.

Third : The main wards must catch direct sunlight, and the cleansing action of the south-westerly wind must be made use of.

Fourth : The entrances are fixed at the bridge and at N.E. end of site.

Fifth : The land slopes, as the diagram shows. Is this to promote a symmetrical arrangement or otherwise ? Can it be made to help, or is it a definite hazard?

There are other factors bearing on the design, some, perhaps, quite important ones; but those enumerated can be traced as we go through the various drawings.

HOW THE VARIOUS CONDITIONS WERE SATISFIED

Looking at the winning block plan (figure two) one sees, first, the power-house, its position low on the site and to leeward. Next, the Medical Faculty buildings, near the main entrance, and again on low ground. (For elevation, see figure four.) In addition, these buildings are low; they offer no obstruction to light or air. Then there is the general aspect of the hospital blocks, facing south (see figure three), and defining certain axes and main lines of the scheme, while they also bite into the south-west wind, as it were. The entrances are defined; and, finally, one must pay homage to the uncanny skill with which the slope of the ground has been overcome by the weight of the symmetrical arrangement of the great blocks, and then turned most brilliantly into one of the greatest assets the site could present.

Again, these solutions by no means produce a design just because the problems posed are all satisfied by this design. It might not, for instance, have seemed feasible to drive the fine road across the top of the scheme; or to have split the main motor roads; or to have provided no access direct to the administrative block; or to have placed the out-patients' and casualty blocks where they are.

Looking at some of the other designs, reproduced for the sake of clearness in diagram form (figures five to eight), many solutions are seen to be possible, and many of the conditions may be fulfilled with no ideal plan emergent. A study of these plans will be repaid, even at the small scale which lack of space enjoins, but as I have my reasons for leaving them undiscussed, it may now prove of more value to enter with some detail into the workings of the one design which has most cause to concern us.

(*To be concluded next week. Readers are advised to keep this issue by them, as the illustrations here given will be referred to again.*)

Architects' Advisory Panels

To the Editor, THE ARCHITECTS' JOURNAL

SIR,—The C.P.R.E. Advisory Panel meeting at the R.I.B.A. on January 23, opened by the Minister of Health, certainly cleared the air regarding work accomplished by the advisory panels set up by the ex-Minister of Health. The panels were appointed primarily to work grants under the Housing (Rural Workers) Act, 1926. Afterwards it was arranged that they were to assist rural local authorities in preparing schemes under the Town Planning Act, 1925.

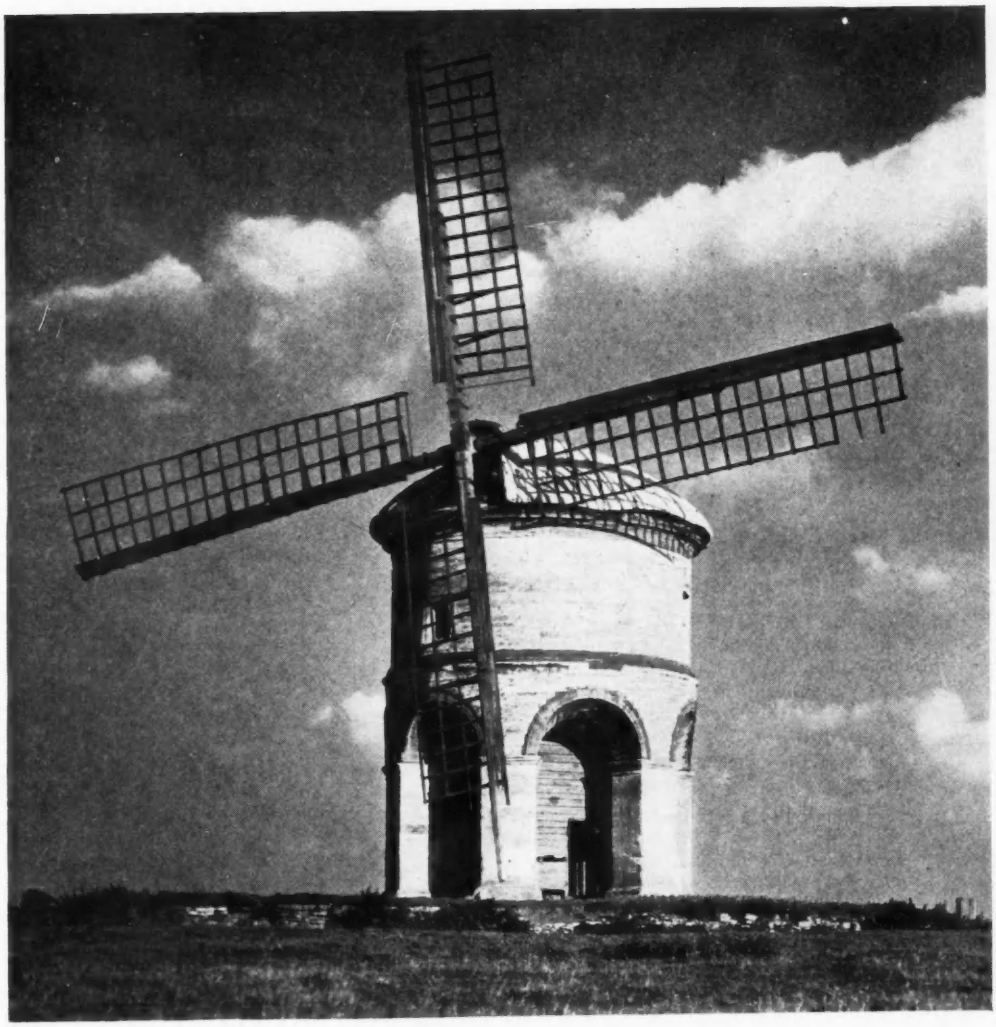
The results reported on January 23 were negligible. The Hampshire, Oxford, Cheltenham and Cambridge panels had between them helped to improve the elevations of some cottages designed by builders, and Hampshire had ventured to speak its mind to a multiple shop. No panel could point to work accomplished ten miles from the convener's office. Yet the length of one panel district is 140 miles. Altogether there are twenty panels; sixteen had nothing to report. Mr. Greenwood blandly remarked : " The better the cause, the slower the progress." Some members of the conference thought that a reduction in the area of each panel would give better results. Others pinned their faith on compulsory legislation. Most seemed to think that a new and better Town Planning Act should be forthcoming from the Ministry.

In the meantime the audience dwindled away and the discussion devolved on the precise legal difference between a tribunal and a panel. Professor Adshead solved the problem. The meeting sent a heartening message to Mr. R. S. Young, M.P., and dispersed.

The truth is that the members of district councils and the men who ribbonize our highways do not read C.P.R.E. propaganda and have never heard of the C.P.R.E. and the advisory panels. The C.P.R.E., in spite of a magnificent Press, is still in the clouds and has not come down to rural England. The Council has made no effort to bridge the gulf between speculative builders and architects. Yet everyone who motors ten miles along an *A* road, a *B* road, or even a country lane, realizes the desperate necessity. The great speculative syndicates have professional advisers of a kind. The little man who acquires an odd acre has no one to whom he can turn. In the aggregate it is the little man who vandalizes more. There are many architects willing to help, but they cannot offer their services or quote a scale of fees until the R.I.B.A. authorizes a scale and settles the machinery for bringing the scale to the knowledge of the little builder.

It is obvious that the right to help and the right to advertise the fact must sooner or later be granted—if not to individual architects, at any rate to properly constituted panels.

HASTWELL GRAYSON



ENGLISH PRECEDENT No. 101

WINDMILL, CHESTERTON, WARWICKSHIRE

The English landscape has few objects so picturesque as the old windmills, now, alas! fast disappearing. These windmills are essentially buildings in the vernacular and possess no claims to architectural quality—certainly none to classicism. The mill at Chesterton, in Warwickshire, is of very different character. Built of stone, it stands on six piers, the intervals between which are spanned by semicircular arches, the base and capital mouldings of which demonstrate the refinement and ability of the designer, as also do those of the band below the drum. The backs of the arch voussoirs are stepped. The mill has a lead-covered domed top. Notwithstanding the difficulty of designing an arcade circular in plan, of so small a radius, the effect produced is remarkably satisfactory. There is a brick archway in the neighbourhood, which may have been designed by the same hand.

The smaller view was taken at a later date, when the wooden structure inside the arches, which was essential to the working of the mill, had been removed. The building has been scheduled by the Office of Works. —[NATHANIEL LLOYD.]



JAGO *v.* SWILLERTON AND TOOMER

In the matter of the Arbitration Act, 1889

BY KARSHISH

This is an action before an arbitrator, brought by Colonel Jago, J.P., jointly and severally against builder and architect, for damages for the collapse of a village hall. Mr. Chawlegger, K.C., and a Junior represent the plaintiff; Mr. Twistle the defendant Swillerton, and Mr. Pitfall, K.C.—with him Mr. Wrackem—the defendant Toomer. The second day's hearing has concluded the defendants' case, and counsel have now to address the arbitrator in the interests of their respective clients.
Though the case related is true to life in every particular, the characters named are fictitious.

v: Mr. Pitfall's Closing Address

THERE was a tense suppression in the air when the arbitrator entered, bowed to Counsel and others present, who, as usual, stood to receive him, and took his seat at the head of the table. The tough of the fight, when the whole resources of Counsels' learning, acumen, resource, wit and eloquence would be called for, was at hand; and the awareness of the rival advocates, as they concentrated on the supreme effort it was their honour and pride to make for their clients and in professional emulation, disallowed the light interchanges that had introduced the proceedings on the previous days. By the rule observed in civil actions, as distinct from criminal prosecutions, Mr. Chawlegger had the privilege of presenting the plaintiff's case in the last speech made to the arbitrator. Accordingly, it was Mr. Pitfall, as senior advocate for the defendants, who first spoke. He slightly turned his chair towards the arbitrator, his papers in the charge of the faithful Wrackem—who sat by his shoulder ready to prompt him with figures and with facts—and, leaning forward with folded arms resting on the table, addressed the arbitrator with an air of easy precision and clarity, as though he had merely to elucidate a matter of common knowledge; but, as he went on, earnestness enforced his logic, and conviction gave incisiveness to his plea that both law and justice entitled his client to an award. His emphasis stopped short of gesture; but at particular points he put forward his hand, while he held the arbitrator's eye, and tapped impressively on the table with his finger.

Sir! (Counsel began) this, as you have heard, is the case of a village hall erected for a building-owner under contract by a builder to the designs of an architect. Shortly after the hall is built it collapses, and the building-owner claims damages, jointly and severally, against the builder and the architect, for negligence.

The main facts are not in dispute. It is common ground that the relations of building-owner, architect and contractor had been duly set up; that the work had been certified by the architect as having been completed; that the collapse occurred before the expiration of the term within which the builder was responsible to make good defects; that the cost of reconstruction is £3,127; that no defect contributory to the collapse was notified to the architect or builder by the building-owner previous to the collapse; that the plans, specification and instructions prepared by the architect and supplied to the builder were efficiently drawn, and that the builder gave due attention to those directions and built soundly and well.

Mr. Chawlegger: My learned friend is going too far. My submission is that the defendant Toomer's directions were neither complete nor efficient.

Mr. Twistle: I wish, sir, on behalf of my client, to associate myself with the submission of my friend.

Mr. Pitfall: My friend on the other side said, in his cross-examination of my client, that he greatly admired the detailed exactness of my client's specification: I am glad to know that my friend is now reduced to swallowing his own words and clutching at this straw. If he thinks it will support him he is welcome to it.

The Arbitrator: Please proceed, Mr. Pitfall.

These main facts, sir—Counsel continued—are not in dispute, and all parties are, in addition, agreed as to the circumstances of the collapse. It is common ground that the floor was laid with boards of American maple-wood, forced up close with flooring cramps; that blocks and wedges, placed between the marginal boards and the walls, were left in place; that damp air circulating under the floor caused the boards to take up moisture and swell; that this led to an aggregate expansion of the whole floor which brought an enormous pressure upon the side walls; that consequent on its state of compression the floor buckled when danced on, and that the dancing on the floor after it had buckled resulted in the collapse of the building. On the showing of these facts, sir, the plaintiff contends that it was an implied obligation of my client to direct the removal of the blocks and wedges and to satisfy himself that they had been removed, and that the defendant builder, independently of any instructions given to him, was responsible for the removal of the blocks and wedges, and that therefore the failure of each, or both of them, to secure the removal of blocks and wedges amounts to legal negligence; that the collapse of the hall was due to this negligence, and that therefore the defendants, or one of them, is responsible to him in damages for the collapse.

The defendants, sir, on the other hand, contend, first, that the omission to remove the blocks and wedges did **not** amount to legal negligence; secondly, that the omission to remove wedges was **not** the cause of the collapse of the building; and, thirdly, that the collapse was due to the wilful or negligent act of the plaintiff. On behalf of my client, Mr. Toomer, I further contend that, even if negligence on the part of the defendants should in any degree appear, my client is completely exonerated as against the defendant builder.

From what I have said, sir, you will perceive that the crux of the case lies in what **does** in fact constitute legal negligence, and what does **not** in fact constitute legal negligence; and upon the application of that **rule** to the particular circumstances you are investigating.

It is not, sir, necessary for me to remind you that we are here concerned only with **legal** negligence—that is to say, with that kind of negligence which is called culpable or blameable negligence, and in regard to which a claim for damages alone can lie. The nature of negligence, as the law recognizes it, has been fully expounded by learned judges whose pronouncements have determined its interpretation in its many aspects under a vast number of contingencies.

I will, sir, submit that in no single one of these several aspects can a charge of negligence be shown to lie against the defendants.

First, sir, I call your attention to this obscure, artificially-prepared flooring material, American maple, which the supplier, called as witness for the plaintiff, told you was delivered by him to the builder kiln-seasoned and prepared for laying, as received from the American manufacturer. Now, sir, it was laid down by Mr. Justice Erle in *Turner* v. *Garland and Christopher* that if an architect is to employ, out of the ordinary course, some novel thing in which he has not experience, **failure of that thing is still consistent with his skill.** In the case quoted, the defendant architect, who had used a new patent roofing substance which failed, got the verdict. In the present case, sir, my client used, not a roofing, but a **flooring** material; and if American maple, by reason of being a natural substance—however obscure and however artificially prepared—cannot be patented, it is still so new in experience that the plaintiff—in spite of the urgent need he had to bolster up his claim with evidence of a common knowledge—could produce as witness only that amazing person who described himself as a practical architect licensed by the Royal Institute of British Architects to keep pigs.

The Arbitrator: As a Fellow, and Member of the Council, of the Royal Institute, I must venture to correct you, Mr. Pitfall. The Royal Institute does **not** license architects as pig-keepers.

Mr. Pitfall: I stand corrected, sir, and tender my profound apologies for having misstated the witness's credentials; I **should** have said—a pig-keeper licensed by the Royal Institute of British Architects to practise as architect.

The Arbitrator: That, Mr. Pitfall, is even worse.

Counsel: I agree, sir, it is a bad lookout for my friend, whichever way it is put. I can only say that I am content to put it whichever way my friend prefers. He will, I am sure, appreciate the spirit in which that offer is made.

Mr. Chawlegger: He does—perfectly.

Mr. Pitfall: The learned arbitrator will understand my difficulty.

The Arbitrator: I suggest that the learned counsel may safely leave his difficulty unsolved.

Mr. Pitfall: I bow to your ruling, sir, and will content myself by saying that the only person the plaintiff could find to prove common knowledge of the nature of maple flooring was an amazing person who is **either** an architect licensed by the Royal Institute to keep pigs, **or** a pig-keeper licensed by the Royal Institute to practise architecture—but as to **which,** plaintiff's counsel, who called him, can offer no opinion—and who spoke of the "bursting power" of American maple. I submit, sir, that the use of that expression, "bursting power," by a witness put forward as an expert, not only marks that witness as an ignorant charlatan, but totally discredits the plaintiff's contention of common knowledge. You will, sir, I think agree with me, that on a point so essential to the plaintiff's case as this proving of common knowledge, no pains were spared to find evidence of the fact; yet the only witness my friend has been able to produce is one obscure archipigkeeperteet. You observed, sir, how completely and immediately that witness broke down under my cross-examination, and I submit that the evidence he gave not only failed to show common knowledge but was conclusive proof of the **absence** of common knowledge.

The timber merchant called by my friend admitted in cross-examination that he had never known a case of a maple floor buckling; and you heard the plaintiff's own expert surveyor, who had investigated the whole of the contingent facts, agree that, so far as he knew, the behaviour of the floor of Grastopen Village Hall was **"entirely unprecedented."** Sir, I submit that my client did, in fact, use in this floor a "novel thing" of which not only he, but no one else, had due experience; and that under the pronouncement of the learned judge I have just quoted, the buckling of the floor was still consistent with skill on the part of both defendants, and that therefore no case of negligence can lie against them. I also submit that in admitting that the buckling of the floor was entirely unprecedented, the plaintiff admits common knowledge to be an impossibility.

But, sir, I am not going to tax you to balance the scales of justice entrusted to you, with this weighty fact **alone.** Negligence, sir, to be actionable, must consist **either** in one or more acts of gross negligence, **or** in habitual acts of trivial negligence. **What** is this gross act—**what** are these habitual trivial acts, the plaintiff depends on to sustain his plea of negligence? It has been successfully argued—and I, sir, do now urge, as the **only** safeguard against the destruction of any architect by any wealthy and arrogant employer—that when an architect advises a client to the best of his ability, and the client elects to act on that advice, and the advice turns out not to have been, in the particular circumstances, the best that could have been given, **then,** in that case, the architect ought **not,** in justice, to be penalized. It is for **you** to decide, sir, in what terms my client warned the plaintiff of the uncertain and refractory nature of American maple of which—as he told you in evidence which my learned friend did not attempt to traverse in cross-examination—he had some knowledge; but whatever words my client may have used at that interview, it is abundantly clear that the use of American maple was debated between the plaintiff and my client; that my client's advice was tempered by knowledge of maple and by knowledge of the plaintiff's needs; that my client definitely submitted his proposal to the plaintiff and, as an exact and careful man, noted on the spot the instructions that the plaintiff did there and then **give to him.** You, sir, have seen the note my client made on that occasion, and can remain in no doubt that he acted at that interview with **circumspection, forethought,** and **conscientiousness;** and I submit, sir, that, merely because the carefully-qualified advice he then tendered did not, as it chanced, prove the best possible in the circumstances, the plaintiff is **not** entitled to place upon the shoulders of my client the unknown risks which every building-owner has to face when he elects to build, and force him to pay £3,000, because a carpenter, having **no conceivable reason** for knocking out a wedge, did not knock it out.

I must **now,** sir, in the interests of my client, as distinct from those of the defendant Swillerton, submit, that even **if**—for some reason of which I am entirely unaware—a suggestion of imperfect foresight on the part of the defendants may conceivably dwell in your mind, my client **must,** nevertheless, be still entirely and completely exempted from any such implication—as I will now ask your leave to show.

The obligations of an architect to the building-owner and his duty to the builder, sir, consist in supplying the builder with complete instructions by means of drawings, specifications and otherwise, to the end that all parts of the materials and details of labours required in the construction, and their methods of use, shall be clearly defined, so that the builder shall know exactly what is required of him; **but,** sir, those instructions do **not** include, and are not **supposed** to include, and cannot **possibly** include, and would awaken the builder's resentment if they were **made** to include, directions—other than exceptional and special directions—as to the **tools** the builder shall handle, or his method of employing them. My client duly drew and described the foundations for, and the arrangement of, the floor boards; and directed they should be laid up close with a special device called "flooring cramps," and

then cleaned off smooth, and afterwards finished with skirtings fixed to special strips of wood nailed to the walls above the floor and which, in the building trade, are called "grounds." The blocks and wedges were not described in the specification nor shown on the drawings because they formed no part of the **permanent building.** They were what engineers call "false work"—that is, work fixed temporarily to enable the permanent structure to be erected, **or,** alternatively, they were in the nature of tools, or implements. It was entirely a matter of the builder's choice and convenience whether he would use such blocks and wedges or adopt some other way of achieving the purpose they served of lining up the first board laid and forcing the last close up to their neighbours. You heard, sir, the defendant Swillerton admit to me in cross-examination, that if these blocks and wedges had been of iron—had they, that is to say, been, **in fact,** implements—he would have removed them; and he did **not** remove them because, though they served the purpose of tools, they were—being merely bits of unwanted wood—not worth preserving. I submit, sir, not only that my client did not order blocks and wedges to be used, but that he was, as architect, not concerned to know whether they were used or not used; that he had no means of knowing they **were** used, and if he **had** known it he could still not have known they were being left in place **unless** he had chanced to visit the building during that short time the carpenters were at work fixing the skirtings over the wedges; and it is, sir, as you have noted, **not** the use of the wedges, but the **leaving of them in place,** which is the point of negligence insisted on by my friend. By no showing can my client be held responsible for the use of these wedges.

Mr. Arbitrator, I submit with perfect confidence, but with the greatest respect, that I have answered the specific grounds upon which the plaintiff urges negligence. **But,** sir, if I now remind you of the pronouncements which establishes the **general principle** of what **does** and what does **not** constitute legal negligence, you will, I believe, hold that, quite apart from the particular points I have laid before you, the defendants are—and must be, under the general rule—**entirely** exonerated and exempted from any implication of negligence.

First, sir, I have to call to your mind that legal negligence on the part of architect or builder exists **only** when it can be shown that structural defects have arisen which are due—on the part of the builder—to defective workmanship or materials, and—on the part of the architect—to faulty design or lack of supervision. Of **what** fault in design, sir; of **what** defective work; of **what** lack of supervision is my client guilty? The plaintiff's own witness, as well as the eminent engineer whom I called—and whose impartial analysis impressed everyone in this room—alike paid tribute to the completeness and competence of my client's design and the soundness of the builder's work; and my learned friend—although he now wishes to forget it——

Mr. Chawlegger: He wishes nothing of the sort.

Mr. Pitfall:——who **even now** has no wish to forget it, commended the detailed exactness of my client's specification. Of what faulty supervision is my client guilty? As architect he was responsible for general supervision **only;** and general supervision has been more particularly defined as **inspecting the work at appropriately limited intervals.** No evidence whatever has been produced by my learned friend—who in his desperate position would have clutched eagerly at any such support—that the intervals between my client's inspections were **unduly** long; and you have heard it given in evidence, sir, that my client could not possibly have known that blocks and wedges were being used **unless** one of his visits of inspection had chanced to coincide with the laying of the last of the floor boards, and **even then,** sir—and I ask your permission to stress the point—my client would have had no reason to know—or even suppose—that the wedges would be left in place unless his visit had chanced to coincide with the **act of fixing the skirtings;** that is to say, the only intimation he could possibly have had that the wedges were being hidden by the skirtings was the remote—almost impossibly remote—chance, that he should walk into the hall at the **exact hour** during which the wedges were in the process of being so hidden. It is upon the failure of this almost impossibly remote chance of a coincidence that the plaintiff bases a claim for negligence, and, I fancy, Mr. Arbitrator, with an equally impossibly remote chance of success.

Mr. Arbitrator, I feel that you will realize the **enormous** importance to my client of establishing himself with you on this point of negligence, and that you will allow me to remind you of the definition of legal negligence which has stood for seventy years, and still stands, as the authoritative pronouncement on the subject. The words I shall read to you, sir—said counsel, taking an open volume passed into his hands by his faithful junior—will not be unfamiliar to you. They are those of that learned and revered judge, the late Baron Alderson, and formed part of his famous judgment in *Bligh* v. *The Birmingham Waterworks Company*, and I submit, sir, that even if you dismiss from your mind the **whole** of the particular points destructive of the plaintiff's case which I have already represented to you, these authoritative words of his lordship on the general question will entirely demolish the impudent contentions of the plaintiff. The learned judge's words are as follows——

Mr. Chawlegger: What are you reading from?

Mr. Pitfall handed a book to Mr. Chawlegger—who glanced at it and returned it—and then proceeded to read as follows:

"Negligence is an omission to do something which a reasonable man, guided upon those considerations which ordinarily regulate the conduct of human affairs, would do; or doing something that a prudent or reasonable man would not do."

Sir, in **what** has my client omitted to do what a reasonable man **would** do? **What** has he done that a prudent and reasonable man would **not** do? I submit, sir, that the plaintiff has brought no tittle of evidence to show that my client has not throughout acted in all ways as a prudent or reasonable man guided by those considerations which ordinarily regulate the conduct of human affairs **would** act—and **more,** sir; I submit that no evidence you have heard has in the least degree brought into question the meticulous conscientiousness, thoroughness, capacity and integrity displayed by my client throughout the whole course of this unfortunate history. **But,** sir, the learned judge whose memorable words I have just read to you says more: he says that mere omission is not actionable unless a duty is imposed upon the person omitting. **What** duty, sir, in seeing that the wedges were removed, was imposed upon my client, and **when** and **by whom** was it imposed? His lordship further says that responsibility and obligation must **precede** the omission—that is to say, sir, the fact of a failure afterwards occurring does not, in itself, establish an anterior responsibility—and that damages arising from it **must be proximate and flow directly from it.** I call your attention to those last words, Mr. Arbitrator, as exactly applicable to the buckling of the floor. **If** my client can be held responsible for the wedges being left in—and I submit, sir, that I have abundantly shown that he can in **no way** be so held—he still is not responsible for the buckling of the floor **unless** the buckling was proximate to and flowed directly from the omission to remove the wedges. I submit, Mr. Arbitrator, that there is here no case of "direct proximate flowing from." If the buckling had occurred while the hall was not in use, or while it was

being applied to any kind of use **appropriate** to a village hall, I do **not** dispute that "direct proximate flowing from" could be maintained; **but,** sir, you have, I think, heard some particular evidence of the use to which Grastopen village hall was put. The plaintiff's own expert timber merchant said that he did not think the floor would have buckled if it had not been heavily danced on; another of the plaintiff's witnesses told you of how the floor remained normal through a long evening of dancing and jollification by a crowd of hearty villagers; and the rector of the parish, whose evidence, sir, must have impressed you as conclusive, made clear that those earlier scenes of jollification and dancing were so noisy, drunken and boisterous that he felt it incompatible with his office to remain in the place. It was **only,** may I remind you, when Bob Garnish started "John Peel" with both the hands of him slamming the piano the way you, sir, it was supposed, would go to beat a carpet, and **only** when the crowd numbering—according to the plaintiff's expert witness, three hundred and twenty persons—began to dance a "gallop" with screechings and leppings the way they did be blown up with gunpowder, that the floor buckled. Sir, there was here no "direct proximate flowing" of cause, in the hidden wedges, to effect, in the buckling of the floor, such as can **alone** make my client—even if he were responsible for omission to remove the wedges—responsible for the buckling of the floor. For all any of us in this room know, there may be scores of village halls in this country that would collapse, as Grastopen village hall collapsed, if they were subject to the same unfair test, but they never **have** been, and never **will** be, so tested.

But, sir—to pursue the impossibility of my client's responsibility one step further—if my client **had been** fully and solely responsible for the buckling of the floor, what would be the **extent** and **degree** of that responsibility? It would, sir, have been almost negligible. I submit that, by a well-established principle, the building-owner is estopped from recovering from the defendants, or either of them, a larger sum than it would have cost to set right the defect at the time the defect revealed itself. To contend otherwise is to say that if a builder carries out faulty work in a roof which the architect fails to condemn, and if subsequently a defect appears and the water gets in, and if, thereafter, the building-owner neglects to notice, or chooses to disregard, the leakage of water so that the decorations of the house are damaged, **then,** in that case, the building-owner can claim from the architect and builder the cost of redecorating. Such a contention is not only invalid in law and in justice, but ludicrous; yet, sir, that, **that** is the contention by which alone my learned friend can make good the plaintiff's claim. In contending that the defendants, or either of them, are liable for the collapse of Grastopen village hall—even supposing they, or one of them, is responsible for the buckling of the floor—he is asking you to say, sir, that a builder who overlooks a displaced roofing tile is liable for the redecoration of the house if the owner chooses to refrain from notifying the defect until the leakage has damaged the decorations. The buckling of the floor was a defect comparable to the displaced tile; the collapse of the building was comparable to the wilfully permitted ruin of the decorations; **and,** sir, it follows that, by neglecting to duly notify the architect and builder of the buckled floor, the plaintiff is estopped from recovering from the defendants, or either of them, a larger sum than it would have cost to make good the defect; and the cost of so making good the floor was stated by the defendant builder to be the insignificant sum of seventy shillings—an estimate which, as you observed, my learned friend did not dispute.

Sir, I will say no more on the subject of this negligence which the plaintiff imputes to the defendants, for I believe that you have no wish, sir, to hear me further on that point.

The Arbitrator: As to that you must use your own judgment, Mr. Pitfall.

(NEXT WEEK—VI: MR. PITFALL ENDS, AND MR. TWISTLE ADDRESSES THE ARBITRATOR)

LITERATURE

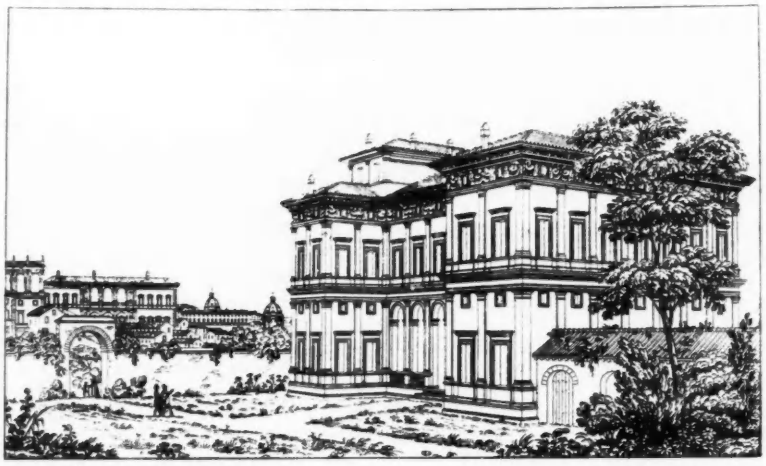
THE BUILDINGS OF ROME

AN attractive and valuable recent addition to the bookshelf of the architectural student or scholar is the edition of Letarouilly's series of drawings of "modern" as distinct from "ancient" Rome, issued by Messrs. Tiranti in six volumes, of which the book before us is the second. It is pleasantly produced and not unwieldy for reference, and is excellent value for three half-crowns.

The somewhat curious effect of the mingling of the language of the author, the language of the capable translator, Mr. Arthur Broadbent, and the languages of both ancient and modern Rome, may appear at first as a defect. On second thoughts, however, one realizes that it serves as a reminder of the threefold contribution to the work—fourfold, in fact, when one includes the Latin of Vitruvius, quoted here and there in the book. In this connection there is an obvious slip in the printing of the dust-cover, on which the two final volumes of the set are announced as dealing with "Eglises et Convents," an unfortunate bilingualism. In the descriptive text, moreover, a building is sometimes "palace," sometimes "palazzo." But these are minor inconsistencies which do but stress the international interest of the buildings of the Renaissance period in the "eternal city."

It is perhaps somewhat tiresome to have the descriptive letterpress referring to both the first and second volumes arranged together at the end of volume ii, but the generous supply of plates and information fully compensates for any small inconvenience.

Having made these few comments, one



From Edifices de Rome Moderne.] [*By Paul Letarouilly.*

The exterior and garden entrance of the Farnese Palace, Rome.



New Bridge, which carries the Witney - Abingdon Road: it was built about 1250, probably reconstructed in the 15th century, and repaired in 1801. The width is 15 feet 2 inches between parapets; the headway 14 feet.

[*From* The Thames Valley from Cricklade to Staines.]

may record whole-hearted appreciation of the volume. The words " Description of Plates " are hardly adequate to indicate the importance of the text. It is rather an " Explanation," which was Letarouilly's word. For the amount of historical and structural information, ably translated or adapted, and suitably condensed by the English translator, is not limited to mere examination of the drawings themselves. An example of the ample and wide nature of the descriptions is the detailed " Preliminary Note " on the Farnese Palace.

In the drawings themselves Letarouilly's inimitable supplementary detail and the figures standing, sitting, gesturing or sauntering beneath painted ceilings or in columned vestibules, provide not merely a necessary standard of scale, but also an indication of human life and purpose without which no edifice, ancient or modern, has any right or reason to exist. V. M. C.

Edifices de Rome Moderne, by Paul Letarouilly. In six volumes. Vol. II. Palais et Maisons. London : John Tiranti & Co. Price 7s. 6d. net.

CALCIUM CHLORIDE AS A PROTECTION AGAINST FROST

A SUMMARY of the extensive literature previously existing in a variety of publications on the effect of employing calcium chloride or sodium chloride as a protection for mortar or concrete against frost has been made by Dr. W. N. Thomas and published as a special report by the Building Research Board. This summary shows that, although a great deal of experimental work has been done in the past by different investigators, there still remains a considerable amount of uncertainty, and often the results are, apparently, at variance. These variations, says Dr. R. E. Stradling, Director of Building Research, in the prefatory note, may be due occasionally to the differences in the test conditions, but it is suspected that the causes are of a more fundamental nature.

The exact significance of the variations has not been determined, and the Building Research Station has not, so far, been able to devote its attention to the study, which is evidently necessary, of the more fundamental aspects of the reactions involved. The report, therefore, does not purport to present new information on the effects of the salts. It is somewhat in the nature of an extended bibliography, and is published in its present form for the convenience of those who desire some information on the subject from the Building Research Station.

The Use of Calcium Chloride or Sodium Chloride as a Protection for Mortar or Concrete against Frost. By W. N. Thomas, M.A., D.PHIL., A.M.I.C.E. Department of Scientific and Industrial Research. Building Research Special Report, No. 14, H.M. Stationery Office. Price 9d. net.

A.A.S.T.A. POCKET DIARY

FOR the eighth successive year the Association of Architects, Surveyors and Technical Assistants issues its pocket diary for 1930, containing, in addition to the miscellaneous data common to such little books, much of a purely technical character. The tables, formulæ, etc., are revised from year to year, voluntarily, by assistants earning their livelihood in the professions represented; and " if," as the foreword remarks, " there are any defects, the blame must be attributed to subscribers who were asked to forward their criticisms and, unfortunately, neglected to do so."

The Association of Architects, Surveyors and Technical Assistants Pocket Diary, 1930. Price 2s. 6d. net. (Post free, 2s. 8d.)

THE THAMES VALLEY FROM CRICKLADE TO STAINES

THIS book is to be welcomed as an example of the regional report " in the grand manner." Not only are the writers who have contributed to its preparation all well known as masters of the respective branches of the subject, but the maps and illustrations are good in themselves and well chosen to enhance the descriptions. They include reproductions of old drawings, topographical sketches by Professor Adshead and numerous photographs, while the maps are particularly well rendered in view of the subjects dealt with.

John Buchan in his preface gives a picturesque sketch of the Thames valley in past ages. He points out that in early times the river offered little advantage except as a boundary, and that it was only in the Middle Ages that it reached its zenith as a route for travel and commerce. It was shorn of some of its glory by the destruction of the numerous religious houses along its banks, but continued as a useful and pleasant waterway until recent times.

As is made clear in the subsequent sections of the book the degradation of the Thames valley began about the middle of the last century by the intrusion of ill-designed railway bridges into the landscape, and later on by the erection of numbers of villas and bungalows along the banks and even on several of the islands. The report speaks temperately and dispassionately of these accretions, as it is realized that it would be impolitic to express the disapprobation that the lack of style and general triviality of these structures would justify. The river is, after all, the playground of the Londoner, and it would be unfair to put obstacles in the way of its use, but with good organization and skilful planning the beauties might have been preserved and the demands for recreation adequately met.

Reference is made to the increased accessibility of the more remote reaches owing to the advent of the motor-car, but it may be pointed out that had it not been for this, the river would be in far worse case today than it actually is. Up to some twenty-five years ago river activities were increasing rapidly, little bungalows were being erected everywhere, and the Thames as a pleasure highway was becoming overcrowded. With the motor opening up other alternatives, things slackened, and for some years before the war the numbers on the river rapidly diminished, and they have never since reached the old figures. What things would have looked like by now, but for the motor-car, is probably beyond imagining, and many reaches that now remain untouched might have been ruined beyond redemption.

To return to the main object of the report, which is to lay down a line of action in respect of the preservation and enhancement of the beauty of our premier river. With this in view it deals with the question of bridges, which are carefully described and many of them illustrated by photographs. With the exception of Brunel's bridge

at Maidenhead the railway bridges are not commended. There are also brief references to roads and footways, as well as to the present and possible industrial developments along the Thames valley. Another chapter deals with the character of the landscape, the trees that flourish and those to be planted with a view to maintaining the general scenic harmony.

Part II of this publication is devoted to recommendations as to the elimination of existing disfigurements, and protection from further ones in the future. Little can be said as to many of the more modern villas, but the frailer bungalows offer the hope that by the time their ephemeral life is ended, public taste may have improved. It is pointed out that the boat-houses and boat-building sheds constitute one of the major disfigurements of the river, and, as they are a necessary adjunct to its life, should be designed to avoid damaging the amenities. The multiplicity of overhead wires is noted as damaging some of the views, and fears are expressed as to the possible results of the activity of the Electricity Commissioners if their proposals are not carefully watched and where necessary challenged.

The methods of protection afforded by the goodwill of enlightened owners, by regional planning and by town planning schemes and by-laws, are outlined, and by the aid of the very explicit set of maps a very valuable general plan for zoning and reservations along the river banks is defined. In determining this scheme the view taken is that it is not so much a case for large public open spaces as for reservations in favour of such uses as will preserve the general character of the scenery. In order to encourage this preservation it is suggested that land scheduled as private open spaces might be exempted from death duties. Other areas, where unrestricted development would be injurious, might be dealt with as "agricultural" or "rural" zones, with regulations appropriate to these.

The numerous suggestions and demands put forward by the authors cannot be reviewed in detail, but they are almost invariably sound and in many cases claim urgent attention lest the opportunity should slip by and another eyesore make its appearance on the banks of our noble river.

H. V. LANCHESTER

The Thames Valley from Cricklade to Staines. By the Earl of Mayo, S. D. Adshead, Patrick Abercrombie, and W. Harding Thompson. With a Preface by John Buchan, M.P. University of London Press, Ltd. Prices, 15s. and 21s. net.

Publications Received

Colour in Treatment of Disease. By J. Dodson Hessey, M.R.C.S., L.R.C.P. Publishers: Rider. Price 1s. 6d. net.

Elementary Carpentry and Joinery. By "Old Chip." Publishers: The Illustrated Carpenter and Builder. Price 2s. net.

The Supervision of Buildings. By George Metson. Publishers: The Illustrated Carpenter and Builder. Price 2s. 6d. net.

The Art of the Pencil. By Borough Johnson. Publishers: Sir Isaac Pitman and Sons, Ltd. Price 16s. net.

Reminders for Company Secretaries. By Herbert W. Jordan. Fifteenth edition. London: Jordan and Sons, Ltd. Price 2s. 6d. net.

Spon's Architects' and Builders' Pocket Price Book, 1930. Edited by Clyde Young, F.R.I.B.A. Fifty-seventh edition. E. and F. Spon, Ltd. Price 5s. net (postage 4d.).

The Cambridge Mediæval History. Vol. vi. Planned by the late J. B. Bury, M.A., F.B.A. Edited by J. R. Tanner, LITT.D., C. W. Previte-Orton, LITT.D., F.B.A., and Z. N. Brooke, M.A. Publishers: Cambridge University Press. Price £2 10s. net.





From "The Thames Valley from Cricklade to Staines." [*By the Earl of Mayo, S. D. Adshead, Patrick Abercrombie, and W. Harding Thompson.*

Gas container at Staines (left) and an old cottage near Staines (right).

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

MR. GREENWOOD informed Mr. Day that on January 1, 1930, there were 25,096 houses under construction in England and Wales under the Housing Act of 1924, and that 32,133 houses were included in schemes approved for financial assistance under that Act. No houses completed after September 30, 1929, were eligible for financial assistance under the Housing Act of 1923. Considerable numbers of houses—38,298 during the last six months for which figures were available—of a rateable value not exceeding £78 (or £105 in the Metropolitan Police District) were, however, being erected without financial assistance from the State. The discontinuance of a subsidy under the Act of 1923 led not only to an acceleration of building before that date, but also to a consequent reduction in the number of houses being built after that date. Recent figures of the proposals submitted by local authorities showed, however, that the number of houses to be built was again increasing. Though he realized that the need for new houses had not as yet been met, he was not, in the circumstances, dissatisfied with the progress that was being made.

Sir Kingsley Wood asked the Minister of Health if he would state the average area of parlour and non-parlour houses, respectively, excluding flats, in contracts let by or in direct labour schemes of local authorities for each month from November to date.

Mr. Greenwood informed Sir Kingsley Wood that the following statement showed, for various months in question as regarded England and Wales, the number of houses completed, and the number authorized but not completed under the Housing Acts of 1923 and 1924 :—

Month.	Number of State-assisted Houses :			
	Completed during the month.		Authorized but not completed at the end of the month.	
	Housing, etc., Act, 1923.	Housing (Financial Provisions) Act, 1924.	Housing, etc., Act, 1923.	Housing (Financial Provisions) Act, 1924.
1929.				
Sept...	26,377*	8,967	—	51,912
Oct...	—	2,278	—	51,131
Nov...	—	4,555	—	51,642
Dec...	—	3,674	—	57,229

* This figure might be subject to adjustment.

Mr. Greenwood said that as regarded houses to be built in England and Wales the figures were as follows : For November 1929, parlour houses, 894 sq. ft.; non-parlour houses, 749 sq. ft. For December 1929, parlour houses, 937 sq. ft.; non-parlour houses, 801 sq. ft.

The number of houses of a rateable value not exceeding £78 (or £105 in the Metropolitan Police District) erected during the six months ended in September last without State assistance was 38,298.

Sir Kingsley Wood asked the average price of parlour and non-parlour houses let by or in direct labour schemes of local authorities during each of the months June and December, 1928, and June and December, 1929.

Mr. Greenwood said the following statement gave the desired particulars as regarded houses to be built in England and Wales :—

Month.	Parlour Houses.	Non-Parlour Houses.
1928.	£	£
June	426	356
December ..	429	338
1929.		
June	404	355
December ..	404	370

Mr. Greenwood informed Sir Kingsley Wood that the number of dwellings completed at December 31, 1929, under the Housing (Financial Provisions) Act, 1924, in agricultural parishes in England and Wales was 15,594.

Up to September 30 last, the latest date for which figures were available, assistance had been promised under the Housing (Rural Workers) Act in respect of 2,200 dwellings in England and Wales. Work had been actually commenced on 2,034 of those, and completed on 1,402.

Mr. Greenwood further informed Sir Kingsley Wood that in England and Wales work had been in progress since May last on eighty-nine slum clearance schemes, three of which, involving the provision of re-housing accommodation for 697 persons, were completed by September 30 last. Eight schemes of this kind had been submitted during the period in question, none of which had yet been confirmed.

Major Elliot asked what was the number of houses authorized under the various heads of the 1923 and 1924 Acts in October, November, and December in 1928 and in October, November, and December in 1929, respectively.

Mr. Greenwood said the following statement gave the desired particulars :

Month.	No. of State-assisted Houses authorized in England and Wales during the month under the	
	Housing, etc., Act, 1923.	Housing (Financial Provisions) Act, 1924.
1928.		
October..	3,996	3,271
November	3,356	4,778
December	6,261	3,643
1929.		
October..	—	5,497
November	—	5,066
December	—	9,261

Mr. Lawson informed Sir Kingsley Wood that the following table showed the numbers of insured persons, aged 16 to 64, classified as belonging to the building industry recorded as unemployed in Great Britain :

1928.	Number.	1929.	Number.
March 26 ..	87,964	March 25..	101,069
June 25 ..	77,869	June 24 ..	67,742
Sept. 24 ..	91,845	Sept. 23 ..	84,585
Dec. 17 ..	120,715	Dec. 16 ..	135,983

Mr. Greenwood informed Mr. Wellock that the number of local authorities in England and Wales who were erecting houses by direct labour at January 1, 1930, was forty-seven, and the number of houses which they had already erected or were erecting by direct labour at that date was 21,164. The figures for January 1, 1928, were forty-six local authorities and 7,528 houses.

Mr. Lovat-Fraser asked the Chancellor of the Exchequer if, in drawing up his Budget, he would consider the desirability of putting a tax on works of art exported from this country to other countries.

Mr. Snowden said that the suggestion had been noted.

Mr. Bracken asked the First Commissioner of Works whether he had submitted the design for the building to be erected on the Calton site in Edinburgh to the Fine Arts Commission; and whether he had consulted with the Commission regarding the selection of the architect.

Mr. Lansbury said that the answer to both parts of the question was in the negative. The plans of the proposed buildings would be finished early in February, but they would not be submitted to the Fine Arts Commission until a scale model of the buildings, which the Commission had requested to be furnished, had been prepared.

Messrs. Elcock and Sutcliffe, chartered architects, have removed their offices to Adam House, 60 Strand, London, W.C. 2.

SOCIETIES AND INSTITUTIONS

TITE PRIZE AND VICTORY SCHOLARSHIP, 1930

THE preliminary competitions for the Tite Prize and the Victory Scholarship will be held in London and at centres in the provinces on Thursday, March 6, and Friday, March 7, 1930, respectively.

Forms of application for admission to the preliminary competitions may be obtained from the R.I.B.A., 9 Conduit Street, W.1. The closing date for the submission of forms of application is Saturday, February 22, 1930.

A LIVERPOOL STUDENTS' COMPETITION

Members of the Liverpool School of Architecture have been invited to submit, in competition, designs for the Owain Glyndwr Memorial Hall, which is to be built by the inhabitants of the village of Glyndyfrdwy, Merionethshire. A party of fifty students, accompanied by Professor C. H. Reilly, visited the site recently. A prize will be awarded to the author of the design which is adjudged best suited to its purpose and to be within the available means of the residents.

It is hoped to make a start on the memorial during the spring.

THE HOUSE YOU WANT

The type of house wanted was a little place in the country or with semi-country surroundings, said Mr. Randall Phillips in his lecture on "The House You Want" at the Architectural Association, the second of a series of non-technical lectures. The plan and interior arrangements should have primary consideration, but probably that would be given to the outside appearance, and the question would virtually be whether to choose the old English or Georgian type.

He said that there was nothing equal to a thatched roof. It kept a house warm in winter and cool in summer. If properly made it should not need attention for twenty years. It was a mistake to think that thatch was inflammable. Any danger to it would come from within the house and could be avoided by a lining of asbestos material.

The majority of people would choose some form of brick house more or less in the Georgian style. They might be daunted when they saw the architect's plans by the bareness of the exterior, but that could be remedied in a few years by the growth of creepers or trees. The most economical type of house was one of oblong form with an unbroken roof.

It was commonly supposed that a bungalow was cheaper to build than a two-story house of the same number of rooms, but except in the case of a very small example the bungalow would probably cost more. As an example that a bungalow need not be a disfigurement, Mr. Phillips illustrated on the screen a picture of a delightful little bungalow set among trees and flowers.

Regarding the interior of the house, the lecturer emphasized the importance of the kitchen or the kitchen-scullery, and showed various labour-saving arrangements, such as sinks with commodious draining-boards set at a slight angle, and various types of service hatches between kitchen and dining-room. He strongly advocated the addition to the kitchen of a small alcove furnished with a table and settles.

INDIAN ARCHITECTURE

The earliest architectural work extant in India exhibits the influence of Persia, said Mr. H. V. Lanchester in a lecture on "Indian Architecture," delivered at Sheffield University.

Southern India, he said, had a gradually developed architecture originally embodying such features as timber construction, thatched roofs and the Buddhist groups of monastic cells. These latter, the basis of the decorations of the pyramidal "vimanas" (temples) and "gopurams" (temple gateways), sometimes rise to a height of 200 feet. The finest example of this style was, probably, the rock cut temple of Kailasa at Ellora (A.D. 800), unrivalled throughout the world for its skilful contrast between sculptured and plain surfaces, and the consequent distribution of light and shade. This style of work has remained the fixed tradition of Southern Indian temple architecture to the present day, though modern work is almost purely repetitive.

Mr. Lanchester also spoke on the Hindu traditions for planning towns, and gave examples showing how the great temple formed the focus of the plan and the rectangular main street line provided for the annual sacred procession. Other points dealt with were the organization of the system of tanks and the use of these in relation to religious observances.

Domestic architecture in stone and in timber was also described and some idea given of the general character of the towns and the variations due to local conditions, the term local being used in its broadest sense, India being less a nation than a continent, with its numerous racial groups and its sixty major languages.

ROMAN CIRCULAR TEMPLES

Sir Banister Fletcher, P.R.I.B.A., lecturing at the Central School of Arts and Crafts, described the Roman circular temples, which, he said, were of peculiar interest to the whole Christian world, as prototypes of the first Christian baptisteries, just as the Roman basilicas or courts of justice were probably of the Early Christian churches. These were among the many instances in architectural evolution in which Christian forms were based on pagan originals, and they helped us to realize that architectural styles were not divided into watertight compartments, but evolved one from another, according to the changing needs of civilization.

Of all the circular temples in Rome, he said, the little Temple of Vesta had the greatest attraction for English people. It was the symbol of that united family life which the old Romans, like the modern English, regarded as the unit of the State. In its simplicity of plan, with its central altar-fire, it stood in the Forum Romanum at the centre of civic life, as a reminder of the sacredness of the Roman hearth.

THE INDUSTRIAL DESIGNS COMPETITION

Particulars of the seventh annual open competition of industrial designs to be held at the Imperial Institute, South Kensington, London, S.W., in June, 1930, have now been issued, and can be obtained from the secretary of the Royal Society of Arts, John Street, Adelphi, London, W.C.2. Intending competitors must apply to the Secretary of the Society between May 1 and May 10 for the necessary entry forms, the last day for receiving entries being May 26. In all scholarships and prizes amounting to nearly £1,900 are offered in connection with the 1930 competition.

The Royal Society of Arts offers a prize of £25 for designs for the decoration and furnishing of a dining-room in a small modern suburban house, and a prize of £20 for a set of black-and-white drawings of architectural subjects. Three scholarships will also be awarded—a travelling scholarship of the value of £100 in the section of architectural decoration or textiles, offered by Mr. James H. Hyde; one of £75, offered by the Tootal Broadhurst Lee Company, for designs suitable for weaving or printing, intended for dress or furnishing materials; and the Art Congress Studentship of £50 for practising craftsmen or designers, founded by the late Sir William Cuthbert Quilter.

Among the other competitions, for which prizes ranging from £5 to £50 are offered, are the following: In the architectural decoration section: for designs for a metal screen for a small church, glazed screen for a fashionable hotel, fireplace, anthracite stove, tile or faience-surround for a wood mantel opening, electric light fitting,

and a wooden litany desk. In the furniture section: for designs for the furniture for a first-class saloon cabin for a liner trading to the Far East; and the furniture and furnishings for a modern lounge.

CORRESPONDENCE

ART IN ADVERTISING

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Both Mr. Burford and "Till" have missed the point.

It is, that the paper is bought for the editorial matter. If the advertisements are to be read, they must be of *greater* interest than the editorial matter for which the paper was bought.

This is the goal to which the good advertisement now makes.

G. H. H.

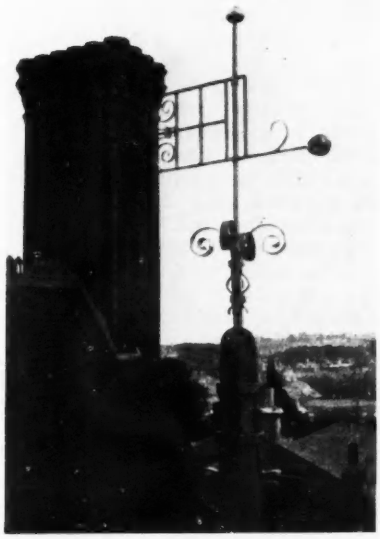
A NORMAN SHAW BUILDING

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The directors of Lloyds Bank propose to rebuild their premises at Farnham, Surrey, which will necessitate pulling down the existing building.

Now, we know that any new premises that Lloyd's Bank put up will be all that can be desired from an architectural point of view, and no doubt they contemplate a sober Georgian building in brick and tile, of domestic character, which will harmonize with those eighteenth century buildings with which Farnham is so well endowed and of which its inhabitants are so justly proud and jealous.

It is true that the building to be demolished is a relatively modern one—I am not sure when it was built, but within the last sixty years—yet it is no ordinary building of its period, being an early example of the work of Norman Shaw. Actually, it is his first important building, and when we compare it with the appalling productions of the same period we realize what a departure it was from current practice, and it helps us to understand what we owe to Norman Shaw (as, also, to Philip Webb) as a pioneer who led us back out of the wilderness of Victorian rubbish to good traditional architecture. Without Norman Shaw there would have been no Eden Nesfield, no Ernest George, no Horace Field, no Edwin Lutyens, as we know and respect them, for each and all of them received material influence through the work of Norman Shaw. It is true that we have all travelled far since Shaw designed the bank premises at Farnham; we should not, now, produce the same kind of thing or indulge in the same licence in our details; because Shaw's work was only a



View on the roof of Lloyds Bank, Farnham, an early example of the work of Norman Shaw, showing the elaborate design of the brick chimneys.

stage in the progress towards better architecture, and we have passed that stage. Shaw, like Webb, was a master of materials. Without overlooking traditional uses, which he assimilated, he designed original combinations, amongst which his chimneys are remarkable. Although we should hesitate to design brick chimneys having the amount of detail of the one illustrated and should demur were it suggested that elaborate carved panels should be introduced or the cap broken up into a multitude of little turrets, we cannot but respect the man who was able to design these, and particularly to have done so when he did.

As Shaw's first important building and as an example of his original and fertile mind, this is an important document in the archives of architecture.

Were it a piece of parchment upon which this was recorded, it would be guarded jealously, be valued highly and, probably, sold by auction for a great price and taken to America. If anyone suggested that such a document should be destroyed, he would be regarded as a philistine, if not actually a madman. Does the fact that the document (the value of which I do not think can be doubted) is of bricks and mortar actually affect the principle? I do not think it does, and I do most humbly but seriously suggest that the directors of Lloyds Bank (to whom architecture already owes so much) should again consider the matter from the points of view that I have ventured to set forth.

NATHANIEL LLOYD

TRADE NOTES

The whole of the paint for the Sydney Harbour Bridge, illustrated in our New Year issue, was supplied by the Sydney factory of Messrs. Lewis Berger and Sons, Ltd., and was made to the specification of Dr. J. J. C. Bradfield.

Messrs. Ruston and Hornsby, Ltd., of Lincoln, oil engine manufacturers, have received instructions to put in hand nine Ruston marine auxiliary oil engine generating sets, each of 306 kw. According to information available, they will be installed (three sets per vessel) on board three motor cargo liners, to be built for the New Zealand Shipping Co., Ltd. Each auxiliary engine will be a 5-cylinder unit working on the Ruston principle of airless injection, and capable of developing 450 b.h.p. at 270 r.p.m. or 500 b.h.p. at 300 r.p.m., and will drive a D.C. dynamo supplied by the General Electric Company.

The first shipment of a 5,000-ton order of "Ferrocrete," the rapid-hardening Portland cement, is now on its way to New York, U.S.A. The cement is required for the construction of river foundation work for the assembly and shipping plant of the Ford Motor Company, at Edgewater, New Jersey. In addition to its being rapid hardening so as to speed up the work, it was essential that the cement should give a watertight concrete. It is significant that the order should come to England in view of the fact that America produces annually over seven times the quantity manufactured in this country.

In a new booklet issued by Messrs. Benham and Sons, Ltd., are diagrammatic details of the Panelite system of heating, and drawings showing the application of the system to various types of patent floors. The system provides for panel or radiant heating in which the heating pipes, although embedded into the surfaces of the walls, ceilings or floors of a room or building, are accessible for repairs or renewal without cutting away the concrete in which they are buried. A Panelite heating coil consists of a system of metal tubing of wrought iron, copper or the like, formed in the shape of a continuous grille, having inlet and outlet for connecting up to a central hot-water system. Round the metal tubing a loose covering or outer tube is fitted of U-shape, of a somewhat similar substance to the finishing plaster surface of the wall or ceiling. A feature of the system is that in new buildings practically all work is carried out on top of the shuttering provided to receive the concrete, and is therefore claimed to be simple and inexpensive to instal. The system is practically complete immediately the shuttering is removed from the finished concrete.

On Saturday, January 25, the annual staff dinner of Messrs. Francis Polden & Co., Ltd., electrical contractors, of 56 Cannon Street, was held at Anderton's Hotel, followed by a concert and dance. The

toast of the Chairman was proposed by Mr. Lamport, who congratulated Mr. Polden on the continued growth of his organization. Mr. Polden in his reply paid a tribute to the cordial co-operation given him by both the office and outdoor staffs. Mr. Gill, the Secretary, was heartily thanked for the arrangements made for the evening.

The new electric washing-machine, the "Hera," recently introduced by Messrs. L. G. Hawkins & Co., Ltd., should, owing to its low price, achieve considerable popularity. It is, in fact, likely to become included as standard equipment in moderately-priced homes on new housing estates. It takes, it is claimed, only fifteen minutes to soak, boil (if desired), wash and rinse thoroughly $6\frac{1}{4}$ lbs. (weighed dry) of assorted washing. The cost of this, it is said, is less than one halfpenny for electric current in most districts. It is claimed that soaking, washing, boiling and perfect rinsing can be done in the machine itself without carrying hot or cold water, and without carrying clothes into the boiler and back again into the rinsing basin.

The Cement Marketing Company, Ltd., of London, has received an order from Norton, Griffiths & Co., Ltd., the contractors, for the whole of the cement requirements for raising the Assouan Dam a further 28 ft. It is anticipated that at least 100,000 tons will be called for. The original dam was 2,150 yds. long, 130 ft. above its foundation and 23 ft. wide at the top. It accumulated 234 million gallons of Nile water for irrigation, by means of which about half a million acres were rendered cultivable. In 1911 work was commenced on raising the dam by 23 ft., thus rendering another million acres arable. The second raising is expected to take three years to complete.

The caption under the illustration of a Compactom Fitment, on page 217 of our last issue, should have read: Part of the Compactom Fitment and furnishing scheme in the ladies' cloakroom of the restaurant at Chiltern Court, Marylebone, W.1.

OBITUARY

JOHN HALL

We regret to record the death of Mr. John Hall, chairman of the British Reinforced Concrete Engineering Company, Limited, which occurred suddenly on January 14, at his home, Charnes Hall, Stafford. Mr. Hall was also chairman of Messrs. Hall and Pickles, Limited, iron and steel merchants of Manchester, and of the Chatwood Safe Company, formerly of Bolton, now at Shrewsbury.

Within recent years Mr. Hall organized the removal of the British Reinforced Concrete Engineering Company, Limited, and the Chatwood Safe Company to their present addresses, building new works of the most modern type, with which were associated housing schemes for the accommodation of the employees. He also built model houses on his own estate at Broughton in Staffordshire.

He took a great interest in technical education, and a few years ago fully equipped a handicraft centre at Croxton, which he handed over to the county education authorities. He was an enthusiast in connection with the general use of electricity for domestic and industrial purposes.

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, general contractors and some of the sub-contractors for the buildings illustrated in this issue:

New Offices for the Royal London Mutual Insurance Society, Ltd., Finsbury Square, E.C. 2 (pages 234-240). General contractors, Walter Lawrence and Son, Ltd., who were also responsible for the demolition, excavation, foundations, dampcourses, concrete blocks, reinforced concrete, plaster and joinery. Clerk of works, L. T. Buckley; general foreman, F. H. Marsh. Sub-contractors: Lawford & Co., Ltd., asphalt; Brookes, Ltd., glazed bricks; Beebys Brick Co., Ltd., flettons; South-Western Stone Co., Ltd., stone; Emerson and Norris, Ltd., artificial stone; Moreland Hayne & Co., Ltd., structural steel; Hollis Bros. & Co., Ltd., flooring; Diespeker & Co., Ltd., terrazzo w.c. partitions and wall linings; United Waterproofers, Ltd. (formerly Waterex Co., Ltd.), waterproofing materials; Rosser and Russell, Ltd., central heating, boilers, and ventilation; Higgins and Griffiths, Ltd., electric wiring, electric light fixtures and bells; Matthew Hall & Co., Ltd., plumbing; Shanks & Co., Ltd., sanitary fittings; Carter and Aynsley, Ltd., door furniture; Crittall Manufacturing Co., casement windows; S. W. Francis & Co., Ltd., rolling shutters; Chubb and Son Lock and Safe Co., Ltd., fireproof doors and strong-room safes; Haywards, Ltd., iron staircases; J. Starkie Gardner & Co., Ltd., and W. T. Allen & Co., Ltd., metalwork and bronze work; J. A. Stevenson, carving, stonework, etc.; J. Whitehead and Son, Ltd., marble; Waygood-Otis, Ltd., lifts; Acme Flooring Co., wood block flooring in basement; J. Freeman and Son, granite works: Samuel Williams and Sons, Ltd., strong-room walls; A. Williams and Son, artesian well, air lifts and plant; G. Jackson and Sons, Ltd., plastering; Morris Singer & Co., bronzework; Turpin's Parquet Floor Joinery and Wood Carving Co., flooring; J. L. Emms, art lead; Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., staircases; J. A. King & Co., Ltd., lantern lights in areas, "Glascrete" on main roof, "Ferro-Glass" for pavement lights in forecourt and rear of buildings, and the floors throughout with the "King" centerless flooring system.

House at Seal, Sevenoaks, Kent (pages 260-261). General contractor, A. W. Wright.

COMPETITION NEWS

February 28.—The Accrington Corporation invite architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor: Herbert J. Rowse, F.R.I.B.A. Premiums: £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars may be obtained from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before February 28.

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated in 1930. The vase is intended as a centrepiece, and may be either a simple vessel decorated in relief and colour, or an architectural composition embodying ornamental adjuncts in the round. It should not exceed eighteen inches in height, though to this dimension not more than six inches may be added for a pedestal or plinth. Assessors: Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums: £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs: April 28.

Mr. E. G. R. Miles, a second-year student of the School of Architecture, University of Liverpool, won the first prize in the competition for electric fittings for the "Pavilion of Light," promoted by the General Electric Co., Ltd., and *The Daily Mail*.



A new table lamp which has been designed and made at the works of Messrs. Hailwood and Ackroyd, Ltd., at Morley, near Leeds. The light in this table lamp is contained in the conical base, which is of "Hailglass," being frosted and sandblasted with a design in keeping with the modern style of the lamp. The statuette symbolical of "light" is six inches high and finely modelled. Both figure and base are cast in bronze with a rich dark finish, forming a pleasing contrast to the glass portion and, when not in use as a lamp, the whole forms a striking ornament for the table.

THE ARCHITECTS' DIARY

WEDNESDAY, FEBRUARY 5

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Roman Architecture." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "The Appreciation of Public Art in England Through the Ages." By Dr. Tancred Borenius.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE ASSOCIATION OF ARCHITECTS. Annual Meeting at Northampton. **4 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Ordinary Meeting. Paper by Joseph Kershaw. **7 p.m.**

THURSDAY, FEBRUARY 6

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate: "That the Architectural Beauties of England be Preserved." Affirmative, E. J. Storry. Negative, G. B. Stickney. **7 p.m.**

INSTITUTE OF ARBITRATORS, 10 Norfolk Street, W.C.2. "Defences in Contract." By W. E. Watson. **4 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. At the Hotel Cecil, Strand, W.C. Annual Dinner and Reunion of the Institution. **7 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "The Raphael Cartoons." By A. P. Oppé. **5.30 p.m.**

AUCTIONEERS' AND ESTATE AGENTS' INSTITUTE, 29 Lincoln's Inn Fields, W.C.2. "The Sale of Real Estate by Private Treaty." By H. H. Robinson. **7.30 p.m.**

FRIDAY, FEBRUARY 7

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "The Historical Background of Italian Art." By Professor Edmund G. Gardner. F.B.A. **5.30 p.m.**

SATURDAY, FEBRUARY 8

Sunrise, 6.32 a.m. Sunset, 5.51 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Third of a Series of Six Non-Technical Lectures on Present-Day Architecture. "The Creation of a Garden City." By Louis de Soissons, O.B.E., F.R.I.B.A., S.A.D.G. (Lantern Illustrations.) **3 p.m.**

MONDAY, FEBRUARY 10

SURVEYORS' INSTITUTION, 12 Great George Street, S.W.1. Ordinary General Meeting. "The Rating and Valuation (Apportionment) Act, 1928." By J. Logie Milne, F.S.I. **8 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Automatic Control in Heating and Air Conditioning Installations." By B. T. Wingfield. 7 p.m. Light refreshments at 6.30 p.m. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. "Recent Developments in the Protection of Three-Phase Transmission Lines and Feeders." By T. W. Ross and H. G. Bell. **7 p.m.**

TUESDAY, FEBRUARY 11

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. First of a course of three lectures on Electrical Transmission by Overhead Lines (1) "The Mechanical Aspects of Overhead Transmission Lines, including Conductors, Insulators and Supports." By Charles W. Marshall, B.SC., M.I.E.E. 5.30 p.m. Faculty of Arts. Fourth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) 5.30 p.m. **5.30 p.m.**

ARCHITECTURAL SOCIETY, University College, Gower Street, W.C.1. Centenary Appeal. The Society presents: R.U.R., by Karel Capek, in the College Gymnasium. Tickets, 3s. 6d. and 2s. 4d. (Also February 12 and 13.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Scottish Centre. At the Royal Technical College, Glasgow. "The Visit of the Institution to France." By W. B. Hird. **7.30 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. "The Diversion of the River Ashop." By Reginald W. S. Thompson, B.SC., ASSOC. M.INST.C.E. **6 p.m.**

WEDNESDAY, FEBRUARY 12

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to Messrs. Doulton's, Ltd., Porcelain Insulator Factory, Lambeth. **2.30 p.m.**

THURSDAY, FEBRUARY 13

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Print Making and Collecting." By W. M. Keesey, M.C., A.R.I.B.A., A.R.C.A., A.R.E. **7 p.m.**

SHEFFIELD UNIVERSITY. Second of a course of three lectures on "The Acoustics of Buildings." By M. H. Evans. (Lantern Illustrations.) **6 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Welding." By Major James Caldwell, M.INST.C.E. **6.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Early Italian Engravings." By Professor A. M. Hind, O.B.E., F.S.A. **5.30 p.m.**

FRIDAY, FEBRUARY 14

TOWN PLANNING INSTITUTE, General Meeting at the Caxton Hall, Caxton Street, Westminster, S.W.1. "The Systematic Treatment of Road Signs." By H. V. Lanchester, F.R.I.B.A.

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Discussion on "Bracing for Wind and Vibratory Forces" to be opened by W. Smith. **7 p.m.**

SATURDAY, FEBRUARY 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to the Home Office Industrial Museum, Horseferry Road, Westminster, S.W.1. Meet at entrance. **2.15 p.m.**

MONDAY, FEBRUARY 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "The Thames Valley Preservation Scheme." By Professor Patrick Abercrombie, M.A., F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture I.) **8 p.m.**

TUESDAY, FEBRUARY 18

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Second of a course of three lectures on Electrical Transmission by Overhead Lines. (2) "Electrical Characteristics of Lines, Resistance, Inductants, Capacitance, Effects of Atmospheric Conditions on Insulation." By Charles W. Marshall, B.SC., M.I.E.E. 5.30 p.m. Faculty of Arts. Fifth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. General Discussion on "Problems in Illuminating Engineering." Light refreshments at 6.30 p.m. **7 p.m.**

WEDNESDAY, FEBRUARY 19

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. Cantor Lecture, "Alfred Stevens: Architect-Sculptor-Painter." **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Honan Night. "Modern Architecture of Sweden." By B. B. Lewis.

THURSDAY, FEBRUARY 20

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate: "That under the present system of Competitions in England, the progress of Architecture is being retarded." Affirmative, J. G. Sidebottom. Negative, T. F. Firth. **7 p.m.**

SHEFFIELD UNIVERSITY. Last of a course of three lectures on "The Acoustics of Buildings." By M. H. Evans. (Lantern Illustrations.) **6 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "The Ancient Guilds and their Halls." By Allen D. Walker. (Lantern Illustrations.) **7.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Italian Furniture." By H. Clifford-Smith, F.S.A. **5.30 p.m.**

FRIDAY, FEBRUARY 21

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Royal Observatory, Greenwich." By Sir Frank Dyson, Astronomer Royal. **5 p.m.**

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE, Gower Street, W.C.1. "The Infirmary of the Mediæval Monastery, with special reference to the Abbey of Westminster." By Professor Percy Flemming, F.R.C.S. (Lantern Illustrations.) **5.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. "Paper Insulated Power Cables." By S. H. Hart. **6.15 p.m.**

SATURDAY, FEBRUARY 22

Sunrise, 6.0 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Fourth of a Series of Six Non-Technical Lectures on Present-Day Architecture. "Decoration and Furnishing." By G. G. Wornum, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

MONDAY, FEBRUARY 24

ARCHITECTURAL ASSOCIATION, 34 Bedford Square. W.C.1. "Designing for the Film." By Lawrence Irving. 8 p.m. Exhibition of Film Settings (until March 22). **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture II.) **8 p.m.**

TUESDAY, FEBRUARY 25

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Last of a course of three lectures on Electrical Transmission by Overhead Lines. (3) "Typical Transmission Lines in use in Great Britain; Characteristic Features of Low, Medium and High Voltage Construction." By Charles W. Marshall, B.SC., M.I.E.E. 5.30 p.m. Faculty of Arts. Sixth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) 5.30 p.m. **5.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North-Eastern Centre. At the Hotel Metropole, King Street, Leeds. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." By L. C. Grant. **7 p.m.**

THURSDAY, FEBRUARY 27

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Social Life and Art in France during the Eighteenth Century." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Ferro-Concrete Cooling Towers." By T. J. Grueritte. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Timber Architecture in Old Houses and Churches." By Philip M. Johnson, F.S.A., F.R.I.B.A. (Lantern Illustrations.) **7.30 p.m.**

FRIDAY, FEBRUARY 28

R.I.B.A., 9 Conduit Street, W.1. London Architecture Medal, 1929. Latest date for submission of nominations.

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. Ordinary Meeting. At the Chamber of Commerce Buildings, New Street, Birmingham, "Types of Movable Bridges." By J. D. Vaughan, M.SC., A.M.INST.C.E. **6.30 p.m.**

ACCRINGTON COMPETITION. Latest date for submission of designs for the New Police and Fire Stations.

SATURDAY, MARCH 1

Sunrise, 6.47. Sunset, 5.39.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, Manchester and District Branch. Visit to the Manchester Newspaper Works and Offices. (Time will be announced later.)

MONDAY, MARCH 3

R.I.B.A., 9 Conduit Street, W.1. General Meeting, "The Design of Modern Railway Stations in Europe and America." By Frank Pick. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture III.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, South Midland Centre. At the University, Edmund Street, Birmingham. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. Also, "The Heat Pump—An Economical Method of Producing Low-Grade Heat from Electricity." By T. G. N. Haldane, M.A. **7 p.m.**

TUESDAY, MARCH 4

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Seventh of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

WEDNESDAY, MARCH 5

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper by L.A.P.A. **8 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Ordinary Meeting. "The Ford Factory, Dagenham." By Major E. H. Heathcote, M.A.(CANTAB.), F.R.I.B.A., A.M.INST.C.E., A.M.I.MECH.E. **7 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. Discussion on "The Space Required for Central Station Equipment." **7 p.m.**

THURSDAY, MARCH 6

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting: Nomination of Officers. "Classic Forms and English Geology." By Hope Bagenal, D.C.M., A.R.I.B.A. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Plywood: Its Influence on Modern Furniture Design." By Percy A. Wells. (Lantern Illustrations.) **7.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual Dinner at the Florence Restaurant, Rupert Street, W.1. 7.15 for 7.30 p.m. **7.15 p.m.**

SATURDAY, MARCH 8

Sunrise, 6.32. Sunset, 5.51.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Old and New Architecture." By the Hon. Humphrey Pakington, A.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

MONDAY, MARCH 10

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Some District Heating Systems." By L. J. Fowler, B.A. Light Refreshments at 6.30 p.m. **7 p.m.**

WEDNESDAY, MARCH 11

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Eighth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. **5.30 p.m.**

THURSDAY, MARCH 13

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate on "Is the Skyscraper Architecture?" Affirmative, D. B. Smith. Negative, G. L. Crowther. **7 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BARKING Education Committee is to erect an elementary school for about 200 children at Hurstbourne Gardens.

Plans passed by the BARKING U.D.C.: New streets and 1,416 houses, Becontree Estate, for the L.C.C.; extension to factory, Creeksmouth, for Messrs. De Pass Fertilizers, Ltd.

The BATTERSEA B.C. recommends the acquisition of the St. John's College site, where the Housing Committee estimates it will be possible to erect blocks of buildings comprising 270 tenements.

The Surrey Education Committee is to consider the provision of secondary school accommodation for the BEDDINGTON and WALLINGTON districts.

The Surrey Education Committee is acquiring a site at CHEAM for the erection of a central school.

In connection with the new baths at Manor Road, CLAPHAM, the Wandsworth B.C. recommends foundation and preliminary works at a cost of £8,185.

In connection with the proposal of the L.C.C. to erect tenements for persons working in Central London on four sites at CLAPHAM, STREATHAM, PECKHAM and STAMFORD HILL, the Housing Committee has decided to obtain estimates from selected firms.

The Croydon Corporation has approved revised plans for the extension of the THORNTON HEATH baths, at an estimated cost of £30,000.

The CROYDON Corporation has asked the borough engineer to prepare estimates for roads and sewers for the extension of the Waddon Estate, where about 500 houses are to be erected.

The CROYDON Corporation has instructed the borough engineer to prepare plans and estimates for the construction of roads and sewers, and the erection of forty-four houses at Downsview Road.

Plans passed by the CROYDON Corporation: Thirty-five houses and thirty-three garages, Maryland Road, and eleven houses, Springfield Road, for Messrs. J. T. Keen and Sons; store, 24 Dover Road, for Mr. C. H. Ridge; conveniences, Shirley School grounds, Wickham Road, for Mr. H. W. Spinks; shops and showrooms, 78–81 North End, for Messrs. Davis Emanuel and Smart; ninety-two houses, Hambrooke Road, for Messrs. Steel and Howes; alterations and additions, St. Luke's Church, Woodside, for Messrs. Burnand and Pickett, Ltd.; offices and store, Croydon General Hospital, for Messrs. Berney and Son; five houses, Farley Road, for Mr. G. W. Peachey; twenty-one garages and workshop, Fairholme Road, for Mr. A. J. Healey; alterations and additions, The Brewery, Surrey Street, for Messrs. Page and Overton's; fourteen houses, Pilgrims Close, twenty-one houses, Brickfield Road, and twenty houses, Carolina Close, for Mr. R. Pierson; twenty-four houses, High View Close, for Mr. J. Maclaren Ross; thirty-two houses, West Way, for Messrs. M. Brown and Sons (Bournemouth), Ltd.; eight houses, Biggin Hill, for Messrs. Thomas and Sons; garage and workshop, High Street, for Mr. E. Pressey; warehouse, St. James's Road, for Messrs. A. H. Allen & Co.; additions and office, Waddon Mills, for Mr. J. T. R. Wildman; eighty-nine houses, Benet and Norton Gardens and Stanford Road, for Messrs. Truett and Steel; bank, South End, for Mr. T. M. Wilson; factory additions, Brighton Road, for Messrs. Fairweather and Ranger; twenty-five houses, Grove Road, for Mr. A. Duckit; twenty-six houses, Lodge Avenue, for Mr. R. B. Manser; nurses' home, Mayday Road and London Road, for Messrs. Berney and Son; aeroplane hangar, Addington, Surrey, for the Horseley Bridge Engineering Co.

The CROYDON Education Committee is to proceed with the erection of three new schools in Gonville Road, Thornton Road and Mitcham Road, and the enlargement of five schools in Long Lane, Tavistock Grove, Rockmount Road, Ingram Road and Stanford Road.

Messrs. R. J. MacKenzie and Sons, Ltd., are to lay out four streets on the Horn Park estate, ELTHAM.

Plans passed by the HACKNEY B.C.: Pavilion, rear of 69 Stamford Hill, for Mr. J. Abraham; one-story shops, forecourts of 210-2 Mare Street, for Mr. F. T. Ford; two-story workshop, rear of 140 King Edward Road, for Mr. J. Krasner; addition to factory, 7 and 9 Belfast Road, for Messrs. F. Dod & Co.; block of dwellings, Shore Place, for Messrs. Rowley Bros.; factory, Wilton Road, for Messrs. J. Pritchard and Son; rebuilding, "Cock Tavern," 315 Mare Street, for Mr. A. E. Sewel; additional story, factory premises, 47 and 49 Hackney Grove, for Messrs. T. Gates and Sons; laundry, Anton Street, for Mr. C. G. Smith.

On behalf of the United Dairies, Ltd., Mr. F. T. Dear is to erect premises at Earl's Court Road, KENSINGTON.

Messrs. Murrell and Piggott, architects, are to erect buildings on the site of 197–205 Brompton Road, KENSINGTON.

The Surrey Education Committee has acquired a site on the Dysart estate, KINGSTON, for the erection of new buildings for the Tiffin Girls' School.

The Surrey Education Committee is to acquire a site in Poplar Road, MERTON, for the erection of an elementary school.

The L.C.C. has leased sites on the St. Helier estate, MORDEN, for the erection of Roman Catholic and Wesleyan churches.

The Surrey Education Committee has obtained from the L.C.C. sites on the St. Helier estate, MORDEN, for the erection of four elementary schools and a secondary school.

The L.C.C. is to further widen High Street, NOTTING HILL GATE, at a cost of £116,500.

The Kent Education Committee is to erect an elementary school in Days Lane, SIDCUP.

The L.C.C. Theatres Committee has passed plans for the reconstruction of the Elephant and Castle Theatre, SOUTHWARK, and the Pavilion Theatre, WHITECHAPEL.

The SOUTHALL-NORWOOD U.D.C. is to enlarge the open-air swimming bath in Southall Green recreation ground, and erect an indoor bath in Southall Park.

In connection with the construction of the section of the North Circular Road at SOUTHGATE, the Middlesex C.C. has made an agreement with the L.N.E.R. for the construction of bridge works at a cost of £140,000.

The Middlesex C.C. has voted £36,410 for the erection at the SPRINGFIELD Mental Hospital of new accommodation for female nurses, the erection of two houses for medical officers, and a house for the engineer.

Plans passed by the ST. PANCRAS B.C.: Extension, 54 Tottenham Street; alterations to covered market, Euston Road, by Mabledon Place; building, 41 West Hill, Highgate; building, rear of 16 Albert Road; building, 236–240 Pentonville Road; building, corner of Johnson Street and Stibbington Street; building, 303–305 Euston Road.

Plans passed at STREATHAM: Forty-six houses, Romeyn Road and Leigham Court Road, for Messrs. F. T. Wooding; two houses, de Montford Road, for Mr. S. Loden; house, Abbotswood Road, for Mr. A. Soden.

The Surrey Education Committee has decided to proceed with the erection of a central school at SURBITON.

The WANDSWORTH B.C. has approved the route of the proposed by-pass road between York Road and Putney Bridge Road.

The WANDSWORTH B.C. is to obtain tenders for the erection of a new maternity home on the site acquired for the purpose in Grove Road, Clapham Park, in accordance with plans prepared by Mr. R. J. Thomson, F.R.I.B.A.

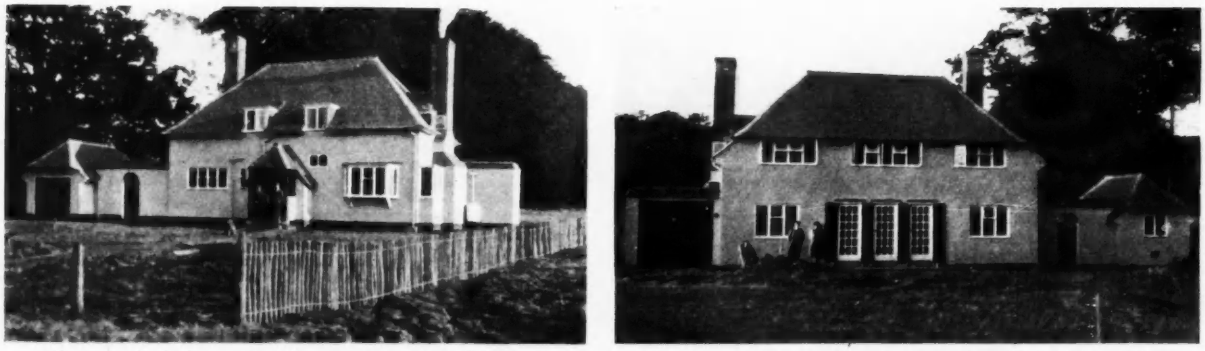
SOUTHERN COUNTIES

Plans passed by the BEXHILL Corporation: Two houses, Holmesdale Road, for Mr. J. E. Maynard; addition, Caledonia School, Clavering Walk, for Mr. Marshall Wood; house, Richmond Grove, for Messrs. Callow and Callow; two bungalows, Knebworth Road, for Mr. H. Steward; house, Westville Road (amended plan), for Mr. F. J. Tomline; house, Mayo Lane, for Mr. C. Purser; addition to chauffeur's house, "Baskerville," Bedford Avenue, for the Rt. Hon. Lord Marks; two bungalows, "The Byeway," for Mr. G. E. Matthews; house, De la Warr Road, for Mr. E. Bunce; new church, Cantelupe Road, for Messrs. Davidson, Son and Sherwood, for the First Church of Christ, Scientist; bungalow, Pebsham, for Mr. J. Tanner.

The Surrey Education Committee has approved sketch plans for the erection of a new block of buildings at the GUILDFORD Grammar School, at an estimated cost of £19,260.

Plans passed by the GUILDFORD Corporation: House, Boxgrove Avenue, for Mr. W. R. Stirling; two houses, Grantley Road, for Mr. W. R. Stirling; additions to masonic suite and dance hall, the Lion Hotel, for Best's Brewery Co., Ltd.; forty-four houses, Shepherd's Hill, for the Housing Committee; alterations to shop, North Street, for Messrs. E. and B. Colebrook; new estate, Worplesdon Road, for Mr. J. M. Rutter; alterations and additions, 187 High Street, for Messrs. Hewett and Lee.

Plans passed by the HERNE BAY U.D.C.: Rebuilding baths and café, St. George's Parade, for Mr. R. Messenger; bungalow, Pier Avenue, for Mr. Stewart; two houses, Canterbury Road, for Mr. Line; bungalow, Station Road, for Dr. Gaitskill; house, Fleetwood Avenue, for Mr. H. Pettman; house, Station Road, for Mr. Wilson; two bungalows, Albany Drive, for Mr. H. Pettman; alterations to baths, East Cliff, for Mr. Cottew; twelve houses, Herne Avenue, for Messrs. C. H. H. Kenworthy, Ltd., on behalf of the Herne Bay Estates, Ltd.



House at Seal, Sevenoaks, Kent. Designed by W. J. Durnford. The entrance front (left) and the garden side (right). The walls are 11 inch hollow, and built of Fletton bricks, finished externally and internally with cream distemper; metal casement windows, with leaded lights in wood frames, have been fitted. The roof is covered with hand-made sand-faced tiles. On the extreme left of the main front a garage has been provided.

The Hampshire Education Committee is to erect a school of the standard type, to serve the parish of MILTON, with accommodation for approximately 120 children, and capable of extension to accommodate a further forty children.

The OXFORD Corporation is to obtain premises in the districts of Wolvercote, Headington, Cowley and Iffley for the establishment of library centres.

The OXFORD Education Committee has purchased land for the extension of the East Oxford council school.

The Hampshire Education Committee is to erect a school at TITCHFIELD to accommodate approximately 300 children, junior, mixed, and capable of extension to accommodate approximately a further 320 children.

SOUTH-WESTERN COUNTIES

The WEYMOUTH Education Committee is to erect a central school for 500 boys at a cost of £21,000.

EASTERN COUNTIES

The CHELMSFORD Education Committee has decided upon the erection of a senior school to accommodate 400 girls and 400 boys in Lady Lane; a junior school to accommodate 400 girls and 400 boys on the same site; a school for 640 infants on the Boarded Barns Estate, and a school for 320 infants in the vicinity of Trinity Road.

Plans passed by the CHELMSFORD Corporation: Four houses, Lynmouth Avenue, for Mr. H. R. Tapp; alterations to bank premises, High Street, for Lloyds Bank, Ltd.; new ward block, outpatients' and casualty wing and additions to nurses' home, Chelmsford and Essex Hospital, London Road, for the governors; two houses, Vicarage Road, for Mr. H. R. Tapp; alterations to shops, 28 and 29 High Street, for Messrs. J. G. Bond, Ltd.; public-house, "The Sandford," Sandford Road, for Messrs. Charrington & Co., Ltd.; offices and covered bus park, Duke Street, for the National Omnibus and Transport Co., Ltd.; house and office, Ransford Road, for Mr. J. C. Pryke.

MIDLAND COUNTIES

The Stoke-on-Trent Corporation Baths Committee has instructed the city surveyor to prepare a scheme for the provision of public baths on the site of Pratt's Works, FENTON.

The Stoke-on-Trent Corporation is to purchase four acres of land at Weston Road and twenty-three acres of land at Uttoxeter Road, MEIR, for housing purposes.

The NORTHAMPTON Corporation Housing Committee has decided to develop the St. David's site, and has instructed the borough engineer to prepare a layout which is to provide for the ultimate demolition of the branch library and other buildings fronting Kingsthorpe Road, and the erection of houses thereon.

Plans passed by the NORTHAMPTON Corporation: Five garages, off Osborne Road, for Mrs. W. J. Rushton; two-story foundry, Balfour Road, for Northampton Foundry Co., Ltd.; house, Vicarage Lane, Kingsthorpe; alterations, Campbell Street, for the Cinema De Luxe Syndicate; extensions, Exchange Cinema, The Parade, for Gaumont British Picture Corporation, Ltd.; extension of cinema (amended plan), Grove Road and Alcombe Road, for Mr. Norfolk; warehouse, St. John's Street and Fetter Street, for Wilkinson Leather Co.; four houses, Park Avenue South, for Messrs. A. Glenn and Sons, Ltd.; alterations and additions, "Castle Inn," St. James's Park Road, for Northampton Brewery Co., Ltd.; club, Bailiff Street, for the committee of the Vocal and Instrumental Club; enlargement of concert room, Wood Street, for the trustees of Fanciers' Club; alterations and additions, shop premises, Abington Street, for Mr. F. Salmon; four garages, Kettering Road, for Mr. C. H. Rainbow; building, Clarence Avenue, for Messrs. H. Holloway and Sons.

The STOKE-ON-TRENT Corporation Baths Committee has decided to inspect the Stoke Gasworks with a view to the provision of a site for public baths in the Stoke area.

The Stoke-on-Trent Corporation Housing Committee has purchased a portion of Swan Lane allotments, TRENT VALE, for housing purposes.

The WALSALL Corporation is to purchase premises in Bloxwich Road, Leamore, for the purpose of a branch library and reading room.

NORTHERN COUNTIES

Plans passed by CHORLEY Corporation: Nine houses, Letchworth Drive; eleven houses, Collingwood Road, and two shops, Claremont Avenue, for Messrs. J. W. Lee, Ltd.; sewers, and layout, for Gillibrand Estates, Ltd.; additions, to bleachworks, Common Bank, for Chorley Bleaching Co., Ltd.; reconstruction of bus garage, Eaves Lane, for Ribble Motor Services, Ltd.; stores, Millfield Road, and two bungalows, Blackburn Road, for Messrs. J. W. Lee, Ltd.; house, Brock Road, for Mr. John Withnell, junr.; house, Walgarth Drive, for Mr. E. Pomfret.

The CHORLEY Corporation has asked a subcommittee to continue negotiations for the acquisition of land suitable for the erection of houses for letting, and to report on the matter as soon as possible.

The North Riding Education Committee is to erect a public elementary school in the parish of CLIFTON, for about 400 children.

Plans passed by the SHIPLEY U.D.C.: New streets and lay-out, Moorhead Lane, Moorhead Crescent, Moorhead Grove, Moorhead Avenue and Ashfield Road, for Messrs. Wm. Pitts and Sons; houses and shops, Bingley Road and Ashley Road, for Mrs. A. Foulds; alterations to bank premises, Briggate, for Messrs. Lloyds Bank, Ltd.; bank premises, Otley Road and Dale Street, for Messrs S. Firth & Co., Ltd.

The TYNEMOUTH Corporation has accepted the offer of Mr. Hector Jewels for the purchase of the remainder of the building sites on the west side of Links Road.

Plans passed by the TYNEMOUTH Corporation: Alterations and additions to works, Bell Street, for Messrs. Hays and Gray; officers' quarters, Tynemouth Union Institution, Preston Road, for Mr. W. Stockdale, for Tynemouth Guardians; alterations to business premises, Hudleston Street, Cullercoats, for Mr. W. Stockdale; alterations, Martin's Bank, Bedford Street, for Messrs. Dixon and Bell; alterations, "Northumberland Arms" public-house, Bedford Street, for Messrs. J. Oswald and Son, for Newcastle Breweries, Ltd.

The YORK Corporation Housing Committee is to obtain tenders for the erection of thirty-nine houses of two- and three-bedroom type in Tuke Avenue. The Committee is to erect further two-roomed houses on the Hope Street site when it is cleared.

Plans passed by the YORK Corporation: Joiner's shop, Spen Lane, for Messrs. Fairweather & Co.; joiner's shop, Vine Street Estate, for Messrs. J. Terry and Sons, Ltd.; mission room, Lawrence Street, for the vicar and churchwardens of S. Lawrence's Church; conversion to hotel, Tang Hall, for Messrs. J. J. Hunt, Ltd.; extensions, Mount School, Dalton Terrace, for the Education Committee; alterations, 5 and 7 Lendal, for Messrs. W. Rowntree and Sons; additions, Thomas Street, for Sheppee Motor Co.; new shops and offices, Piccadilly, for Messrs. W. Dove and Sons, Ltd.; additions, White Swan Hotel, Piccadilly, for Mr. C. Walker; lay-out of land, Acomb Road, for Messrs. Backhouse, Ltd.; bungalows, Temple Lane, Copmanthorpe, for Mr. A. Bennett; bungalow, road off Acaster Road, Copmanthorpe, for Mr. W. H. Oates; bungalow, Cinder Lane, Monk Stray, for Mr. A. Varey.

WALES

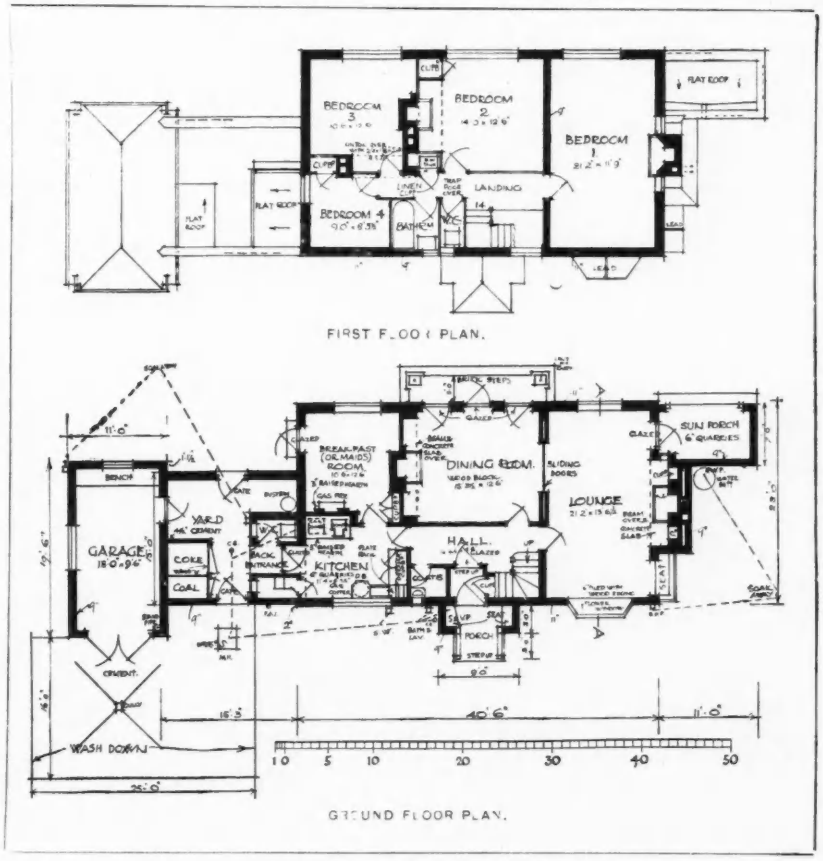
The MERTHYR Corporation has decided that the attention of the Housing Committee be directed to the large number of hovels within the borough, with a view to the Ministry of Health again being approached for sanction to a loan for the erection of houses.

SCOTLAND

The GLASGOW Corporation Housing Committee has approved plans for the layout of the cleared area at Calton.

The GLASGOW Corporation Streets Committee recommends schemes for the reconstruction of ten bridges and aqueducts across the Forth and Clyde Canal.

The GLASGOW Corporation Street Committee has prepared the following schemes: Reconstruction of the King's Bridge, £20,600; reconstruction of the bridge carrying Craigton Road over the L.M.S. railway, £20,600; reconstruction of the bridge carrying main street, Pollokshaws, over the River Cart, £15,000; bridge over the River Cart at Crookston and diversion of road, £25,000; reconstruction of bridge carrying Barrhead Road over the Levern Water, £15,000; and reconstruction of bridge carrying Barrhead Road over the Brock Burn, £15,000.



House at Seal, Sevenoaks, Kent. Designed by W. J. Durnford. Ground- and first-floor plans. The ground floor is covered with stained redwood blocks, with the exception of the kitchen, coats and entrance lobbies, which are paved with red quarry tiles. The whole of the door and window furniture is in bronze. Dutch tiles have been used for the majority of the fireplaces.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 1½
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2¼
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2¼
A	Airdrie ..	Scotland	*1 7	1 2¼
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2¼
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2¼
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B_2	BANBURY ..	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A_1	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2¼
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2¼
A	Barry ..	S. Wales & M.	1 7	1 2¼
B_2	Basingstoke	S.W. Counties	1 4	1 0
B	Bath ..	S.W. Counties	1 5	1 0½
A	Batley ..	Yorkshire	1 7	1 2¼
B	Bedford ..	E. Counties	1 5	1 0½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2¼
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2¼
A	Blackpool	N.W. Counties	1 7	1 2¼
A	Blyth ..	N.E. Coast	1 7	1 2¼
B_2	Bognor ..	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2¼
A_2	Boston ..	Mid. Counties	1 5½	1 1
B	Bournemouth	S. Counties	1 5	1 0½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2¼
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2¼
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2¼
B	Brighton ..	S. Counties	1 5	1 0½
A	Bristol ..	S.W. Counties	1 7	1 2¼
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2¼
A	Burslem ..	Mid. Counties	1 7	1 2¼
A	Burton-on-Trent	Mid. Counties	1 7	1 2¼
A	Bury ..	N.W. Counties	1 7	1 2¼
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2¼
A	Carlisle ..	N.W. Counties	1 7	1 2¼
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2¼
A	Castleford	Yorkshire	1 7	1 2¼
B_1	Chatham ..	S. Counties	1 4½	1 0½
B_1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2¼
A	Chesterfield	Mid. Counties	1 7	1 2¼
B_2	Chichester	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2¼
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2¼
A	Clydebank	Scotland	1 7	1 2¼
A	Coalville ..	Mid. Counties	1 7	1 2¼
B	Colchester ..	E. Counties	1 5	1 0½
A	Colne ..	N.W. Counties	1 7	1 2¼
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2¼
A_2	Crewe ..	N.W. Counties	1 5½	1 1
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2¼
A	Darwen ..	N.W. Counties	1 7	1 2¼
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2¼
A	Dewsbury	Yorkshire	1 7	1 2¼
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2¼
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 6½	1 1½
A	Dundee ..	Scotland	1 7	1 2¼
A	Durham ..	N.E. Coast	1 6½	1 1½
B_1	EASTBOURNE	S. Counties	1 5	1 0½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2¼
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2¼
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham ..	N.W. Counties	1 7	1 2¼
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2¼
B_2	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 5½	1 1
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham ..	Mid. Counties	1 5½	1 1
A_2	Gravesend ..	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2¼
A	Grimsby ..	Yorkshire	1 7	1 2¼
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2¼
A	Hanley ..	Mid. Counties	1 7	1 2¼
A	Harrogate	Yorkshire	1 7	1 2¼
A	Hartlepools	N.E. Coast	1 7	1 2¼
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5	1 0½
B_1	Hertford ..	E. Counties	1 4½	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2¼
A	Hull ..	Yorkshire	1 7	1 2¼
A	ILKLEY ..	Yorkshire	1 7	1 2¼
A	Immingham	Mid. Counties	1 7	1 2¼
B	Ipswich ..	E. Counties	1 5	1 0½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2¼
A	KEIGHLEY	Yorkshire	1 7	1 2¼
B_1	Kendal ..	N.W. Counties	1 4½	1 0½
B_1	Keswick ..	N.W. Counties	1 4½	1 0½
A	Kettering ..	Mid. Counties	1 5½	1 1
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2¼
A_1	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2¼
A	Leek ..	Mid. Counties	1 7	1 2¼
A	Leicester ..	Mid. Counties	1 7	1 2¼
A	Leigh ..	N.W. Counties	1 7	1 2¼
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2¼
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2¼
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2¼
A	Loughborough	Mid. Counties	1 7	1 2¼
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2¼
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2¼
A	Mansfield ..	Mid. Counties	1 7	1 2¼
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2¼
A_2	Middlewich	N.W. Counties	1 5½	1 1
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2¼
A	Morecambe	N.W. Counties	1 7	1 2¼
A_2	NANTWICH	N.W. Counties	1 5½	1 1
A	Neath ..	S. Wales & M.	1 7	1 2¼
A	Nelson ..	N.W. Counties	1 7	1 2¼
A	Newcastle ..	N.E. Coast	1 7	1 2¼
A	Newport ..	S. Wales & M.	1 7	1 2¼
A	Normanton	Yorkshire	1 7	1 2¼
A_1	Northampton	Mid. Counties	1 6½	1 1½
A	North Staffs.	Mid. Counties	1 7	1 2¼
A	North Shields	N.E. Coast	1 7	1 2¼
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2¼
A	Nuneaton ..	Mid. Counties	1 7	1 2¼
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2¼
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2¼
B_2	Pembroke	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2¼
A_2	Peterborough	E. Counties	1 5½	1 1
A	Plymouth	S.W. Counties	*1 7	1 2¼
A	Pontefract	Yorkshire	1 7	1 2¼
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2¼
A	QUEENSFERRY	N.W. Counties	1 7	1 2¼
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2¼
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 1½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2¼
A_2	ST. ALBANS	E. Counties	1 5½	1 1
A	St. Helens ..	N.W. Counties	1 7	1 2¼
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2¼
A	Sheffield ..	Yorkshire	1 7	1 2¼
A	Shipley ..	Yorkshire	1 7	1 2¼
A_2	Shrewsbury	Mid. Counties	1 5½	1 1
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2¼
A	S. Shields ..	N.E. Coast	1 7	1 2¼
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2¼
A	Stockton-on-Tees	N.E. Coast	1 7	1 2¼
A	Stoke-on-Trent	Mid. Counties	1 7	1 2¼
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2¼
A	Swadlincote	Mid. Counties	1 7	1 2¼
A	Swansea ..	S. Wales & M.	1 7	1 2¼
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2¼
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2¼
A_1	Torquay ..	S.W. Counties	1 7	1 2¼
C	Truro ..	S.W. Counties	1 3	11½
B_1	Tunbridge Wells	S. Counties	1 4½	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2¼
A	Tyne District	N.E. Coast	1 7	1 2¼
A	WAKEFIELD	Yorkshire	1 7	1 2¼
A_1	Walsall ..	Mid. Counties	1 6½	1 1½
A	Warrington	N.W. Counties	1 7	1 2¼
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Welling-borough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2¼
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2¼
A	Wigan ..	N.W. Counties	1 7	1 2¼
B_2	Winchester	S. Counties	1 4	1 0
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2¼
A_2	Worcester	Mid. Counties	1 5½	1 1
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
B	Wycombe	S. Counties	1 5	1 0½
B_2	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2¼

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	20	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

	£	s.	d.
Portland cement, per ton	22	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

	£	s.	d.		£	s.	d.
Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

	£	s.	d.
RETURN, fill, and ram, ordinary earth, per yd.	0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Stoneware pipes, tested quality, 4 in., per ft.	0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
London stocks, per M.	24	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0
Add to the foregoing prices, if in York stone, 35 per cent.			
DO. Mansfield, 12½ per cent.			
Deduct for Bath, 33⅓ per cent.			
DO. for Chilmark, 5 per cent.			
SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

	£	s.	d.
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med.*	*Grey*	*Med.*	*Green*
24 in. × 12 in.	£42	11 3	£45	1 0
20 in. × 10 in.	31	4 3	33	0 6
16 in. × 10 in.	20	18 0	22	4 9
14 in. × 8 in.	12	1 0	12	16 3

	£	s.	d.
Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

	£	s.	d.
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

	£	s.	d.
Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey			Med. Green		
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6

	£	s.	d.
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

	£	s.	d.
Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ¾ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, 5/32 in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	6
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster-board, per yd. sup. from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			¾ in.			¼ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—



NEW BAY WINDOW TO DINING-ROOM: LOO WATER, HEACHAM, NORFOLK

BY

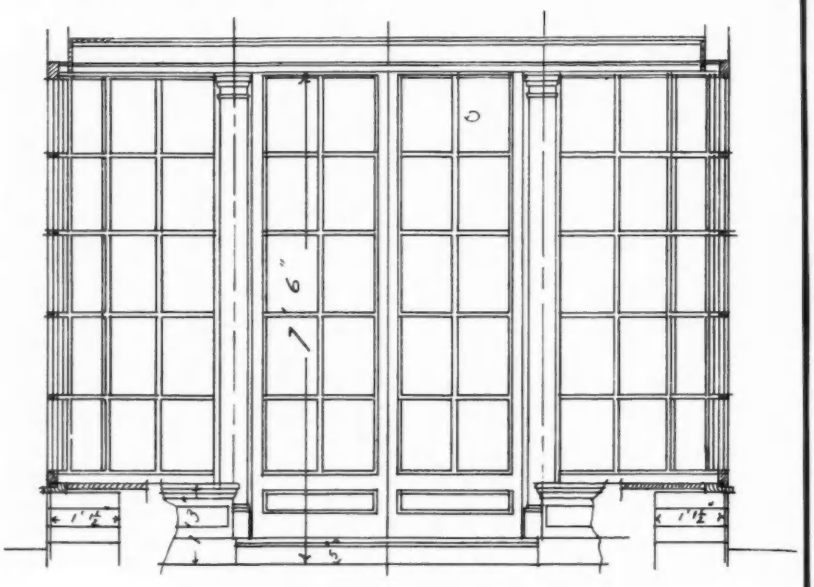
LOUIS DE SOISSONS and G. GREY WORNUM

THE subject of this photograph and the architects' working drawings reproduced on the following page is an addition, one of many made, from time to time, to what was at some remote period a farm house, built of the local Carr stone. The photograph shows, in addition to the new dining-room bay, a portion of the window lighting the kitchen adjoining.

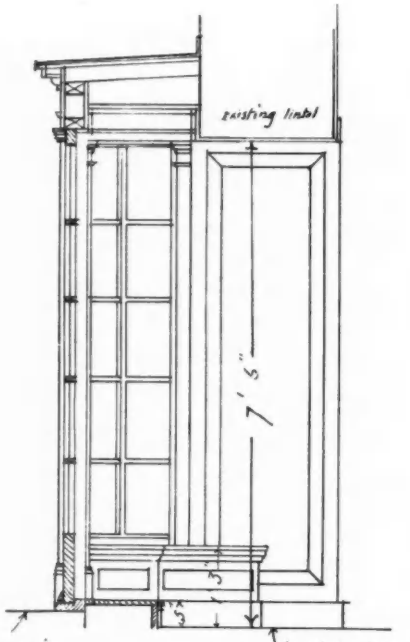
The bay to the dining-room itself, is constructed of wood, with a lead top, and opens on to a small formal stone-paved garden, with the water garden seen in the right foreground. Here, too, though not shown, a feature has been made of an old lead pump, found lying derelict, to which a modern iron stand has been added.

LOO WATER, HEACHAM, NORFOLK

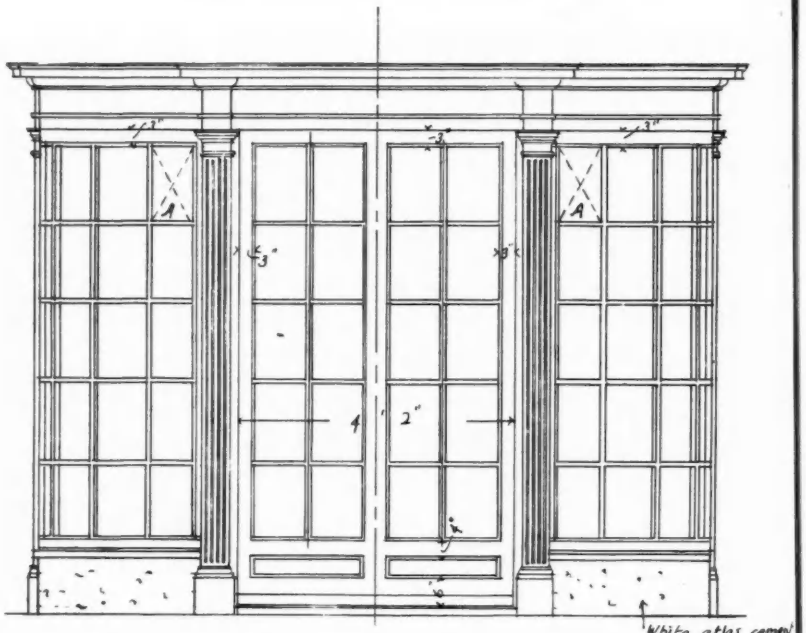
Detail of Bay Window to Dining Room



DINING ROOM ELEVATION

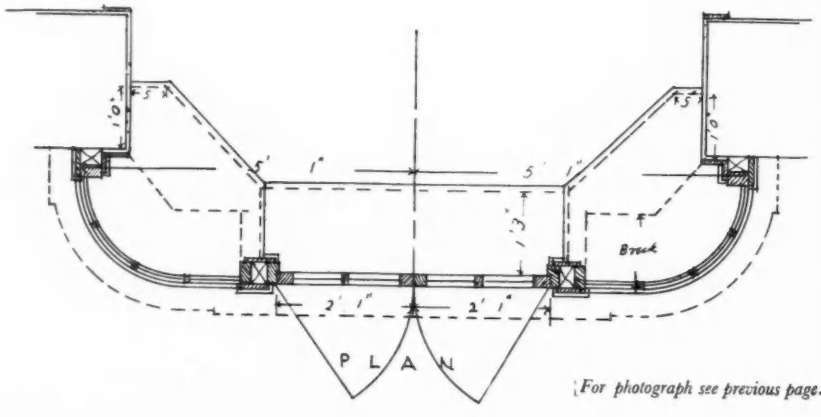


SECTION



ELEVATION

A = Small metal casement

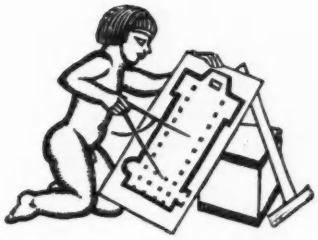


PLAN

By L. de Soissons and G. Grey Wornum]

[For photograph see previous page.

THE ARCHITECTS' JOURNAL



WEDNESDAY, FEBRUARY 12, 1930

THE EXPERT WITNESS

"*A madman and a fool are no great witnesses.*"
—GERMAN PROVERB

THE expert witness is commonly held in little esteem. Small dignity and scant respect are accorded him; he is the target of easy gibes, and the tormented victim of the agility of barristers and of slighting disparagement of judges.

The reason for this is not far to seek. A man who calls himself an expert, who poses as an authority and who affects infallibility, instantly provokes in the wholesome human breast a violent impulse to challenge his pretensions and deny his claims. The term "expert witness" is, in itself, condemnatory, for simple honesty and not alert dexterity is the part of a witness; and we are reminded that this particular kind of witness is handsomely fee'd for holding the views he professes, and that if he held other views not he, but another, would be earning three guineas an hour for staring out of windows or otherwise waiting attendance on the law. The expert witness's existence depends on ability to beat off attack, and maintain, against all comers, the particular point which constitutes his side's "case," but directly he lends himself to any such purpose he becomes, not an expert witness, but an expert advocate, and this no judge will tolerate. An expert witness commonly elucidates technical matters of which a judge can have no knowledge, and any suspicion that the expert is using this advantage to direct the judge rightly awakens strong resentment. Thus the expert witness is regarded jealously by the Bench, and is subject to the most drastic disembowelling devices known to the Bar—and the Bar, be it said, knows all there are.

The position of the expert witness in building disputes is particularly ignominious, for architects and surveyors are not called to testify to scientific or even technical points; they are usually required, as persons of special experience and trained judgment, to support a particular opinion, and to establish the fact, or otherwise, of trade or professional custom. In all such cases there must obviously be conflicts of opinion, even among men best qualified to determine the question in debate; but these unavoidable disparities are aggravated to the point of hopeless confusion by the fact that there is not one standard of building practice, but many, and that the customs affiliated to them vary in a fantastic degree. Constructional devices, methods of craftsmen, qualities of material perfectly appropriate to a soundly-built Tiddlerton shop, would be entirely inadmissible in Regent Street.

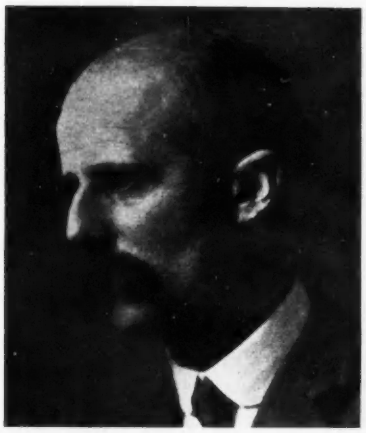
In the fictitious arbitration cause, *Jago* v. *Swillerton and Toomer*, which is now drawing to a close in our pages, an amusing picture is given of three kinds of expert witness. We first see a witness to common knowledge of a special wood, who is a self-acclaimed architect, nourished, as Licentiate, in the bosom of the Institute. This man is an ignorant charlatan whom cross-examination instantly overwhelms with ridicule and contempt. The next expert is an ordinary, competent, workaday provincial building surveyor, who testifies to the ascertained facts of the collapsed building and demonstrates the cause of the collapse by diagrams and calculations, showing the weights, stresses, and moments of stability and overturning involved, according to recognized textbook methods. He contradicts himself under cross-examination, nor in this is he merely the victim of the verbal ingenuities of Counsel. Last, there appears on the scene a figure which the author probably regards as a type of what an expert witness should be. Randegger—for so he is named—says to the Arbitrator: "I object to no questions that are honestly directed to testing my evidence. I welcome cross-examination. I am here expressly to elucidate technical points—so far as I am able." Randegger is also depicted as perfectly capable of defending himself under cross-examination, and, in fact, beats Counsel at his own game. That is the right attitude for an expert witness, and if all adopted it the expert's claims would be widely respected instead of, as now, acknowledged by loud sniffs.



AT THE SIGN OF THE HOWITZER:
ARTILLERY HOUSE, WESTMINSTER

A study of the new block of office quarters, recently erected in Artillery Row, a quiet backwater off Victoria Street, from the designs of the architects, Sir Aston Webb and Son, and Harvey A. Dawson. Further photographs, drawings, and a description, appear on pages 271-4.

NEWS & TOPICS



D. S. MacColl, whose retirement from vice-chairmanship of the National Arts-Collections' Fund draws the accompanying tribute from Sir Reginald Blomfield.

D. S. MACCOLL'S RETIREMENT

THE announcement that D. S. MacColl has retired from the executive and vice-chairmanship of the National Art-Collections' Fund will be received with real regret by all who care for works of art independently of fashion and market values. There is a constant tendency for the control of these associations to slip into the hands of connoisseurs and dealers, and the loss of the services of an artist of the accomplishment and discriminating knowledge of MacColl is a serious matter. Sir Reginald Blomfield sends me the following notes, which will be of particular interest to my readers :—

★

I have known him, as it seems, from time immemorial—anyhow, since I made his acquaintance fresh from winning the Newdigate at Oxford, at the outset of what has proved a brilliant career as a scholar, a writer and an artist. We next came together in the early days of THE ARCHITECTURAL REVIEW. The REVIEW began in a curious way. MacColl was the first editor, but an advisory committee of some dozen architects was formed, and the proprietors of the REVIEW used to give us an excellent lunch at the Savoy, at which we discussed buildings to be illustrated and current architecture. About this time the New English Art Club came into existence, with Steer, Charles Furse and Sickert as protagonists, and other clever young men whose enthusiasm swept away their critical judgment in its rush, but also did much to wake up English art from the comatose condition into which it had lapsed in the 'eighties and 'nineties. MacColl, with his admirable gift of style, was their spokesman and champion, and he attacked the walls of Jericho—in other words, the Royal Academy—with characteristic zest. Lord Curzon organized his Commission of Enquiry, and held a sort of inquest on the Royal Academy, chiefly distinguished by its gross partiality as against that body.

★

About fifteen years ago I made a careful critical analysis of the report of that Commission, and came to the conclusion that, though reforms were necessary, as they are bound to be from time to time in any academic body, the charges made against it were exaggerated and the jury was packed. Artists, as a rule, are not very articulate, and make bad witnesses. It is not their job. And it really required a person more open-minded and sympathetic towards art than the chairman of that Commission to get at the real facts. Moreover, the Academy had against it a redoubtable adversary in the person of D. S. MacColl, though even then he was not wholly bigoted. I can recollect a criticism of his of a book violently attacking the Academy, in which he remarked that even Academicians don't lurk behind the umbrella stand in order to slay their enemies, and since then he has admitted that academies properly directed have their use and even their necessity.

★

Like all good fighting men, he has mellowed with age. Perhaps meditations among the beautiful things of that Wallace Collection, which he directed with such admirable insight, may have widened and strengthened a keen critical sense, and convinced him that all wisdom does not reside either with this or with any other generation. Quite recently MacColl retired from the Royal Fine Arts Commission for reasons of health. Here too, we, his colleagues, greatly regretted our loss. The power of speech and of writing, the ability to give expression to critical views is, unfortunately, seldom found among artists, with the result of that unfortunate cleavage which removes the control of the arts from those who practise them into the hands of those who talk of them. I think I am right in saying that on the Board of the National Gallery there is not a single practising artist, an anomaly impossible in any country but England. It is good news that MacColl intends to fight for the preservation of that countryside that we love, but I hope he will not deprive us of his invaluable help in all those matters of art which very seriously affect the amenities of our civilization.

THE FORM OF RICHMOND BRIDGE

It is good to hear that Maxwell Ayrton has put forward a final emendation to his design for the bridge over the Thames at Richmond. The last design preserved some relics of the four massive towers that were prominent in the first design. This process of elimination, which leaves the bridge with no towers at all, is a difficult one, and it is matter for congratulation that Mr. Ayrton takes his work seriously enough to revise his ideas more times than once. After all, his contribution to the amenities of a very beautiful portion of the Thames will be both considerable and lasting.

A DUTCH MANSION IN TRAFALGAR SQUARE ?

It is announced in the press that Sir Herbert Baker is to design a building in the style of an old Dutch mansion for the Union of South Africa, and on a portion of the triangular block of Regency stucco buildings which are shortly to be demolished, alas ! I find the prospect of an old Dutch mansion in Trafalgar Square very alarming, and can entirely appreciate the feelings and admire the good taste of those London authorities who may insist, according to Sir Herbert Baker, that he uses the same kind of stone as that in the adjacent buildings. I hope that they will not only insist that this new building shall be built in the same materials as the other fine buildings already there—the National Gallery and Canada House—but that they will further point out that in the capital city the publicity value of a Dutch colonial six-story building is to be weighed against other more truly civic virtues. We are a wide-flung Empire, and if there is to be a building in the local vernacular of each and every unit of it the capital city is like to become an overdone Wembley. I hope that South Africa and Sir Herbert Baker will think again.

MASS-PRODUCED ARCHITECTURE FOR U.S.S.R.

Men of the two Unions—of America and of Russia—have given each other the "once-over," as I believe it runs, in the language of the former; with the result that Albert Kahn, Inc., of Detroit, become consulting architects to the U.S.S.R. This is astonishing news for more reasons than one. In the first place, I should have thought it dead against Soviet principles to make any appointment of the kind. Again, the work contemplated is so colossal in extent—the programme for this year alone runs into £380,000,000—as to tax the capacity for design of any ten super-men. Lastly, I permit myself to wonder how the money will be found to pay for it all. Possibly the Soviet State Note Printing Works—however!

★

What's in the contract is, of course, the concern of Moritz Kahn, who negotiated the stupendous deal on behalf of the firm. Indeed, it is clear enough that he regards the whole affair, designing included, as a bit of "big business." "We are given," so runs an interview, "an opportunity to produce in the building industry the same high efficiency that has made American motor-car manufacture the marvel of the world." We are invited to visualize a single member of the firm—for their interests at home must not be interfered with—proceeding to Moscow with a staff of twenty-five specialist assistants, there to help organize a designing bureau of 4,500 polyglot architects and engineers (but "selected principally from Soviet Russia"). In two words, this spells mass-produced architecture.

★

By no other means would it be possible to cope, in five years, with four motor-car factories, and the like; nine plants for farm machinery; six asbestos, corundum and graphite factories; two locomotive works; 15 tool, typewriter and cash register works; 24 cement factories; 126 saw mills; 13 clothing factories; 35 spinning mills; 15 woollen mills; 106 woodworking plants; 27 glass factories; 113 shoe factories; 15 paper mills; 56 food product works. Certainly, Albert Kahn will have to be very much "Inc."

CIRCULAR HALL FOR CHURCH HOUSE

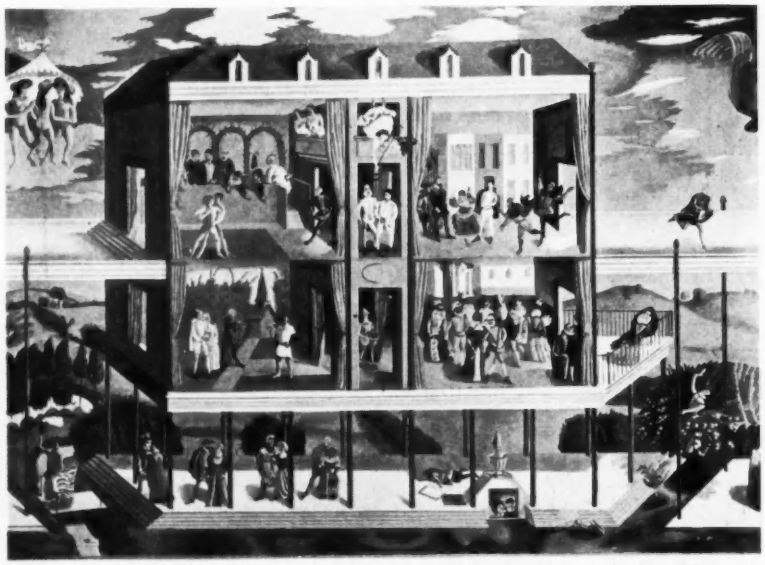
The new assembly hall to be built in a courtyard of Church House, Westminster, is to be a circular building. It is considered by churchmen that the circular chamber is not only practical, but typifies the unity of the Church; clergy and laity being assembled in one round-table conference. It is actually in strict accord with Church tradition, chapter houses being as often round as not.

HOMAGE TO MR. BASIL OLIVER

Mr. Basil Oliver was present last week at a gathering of brewers, architects and University dons which came together to pay homage to the "Rose and Crown," the public-house which Mr. Oliver designed and which has been honoured with the R.I.B.A. bronze medal for the best building in Essex, Cambridge and Hertfordshire in 1928. The building was fully illustrated in THE ARCHITECTS' JOURNAL for November 27 last. The "Rose and Crown" well deserves the replica of the medal which has been fixed to its wall, and that a building small in size and of honest, unpretentious appearance should be so honoured will prove the right sort of incentive towards good design in smaller street architecture.

MURAL ART AT MORLEY COLLEGE

Sir Joseph Duveen has again proved himself a most generous and wise patron of the arts. It will be remembered that he provided money and space for a young man to paint mural decorations for the refreshment room of the Tate Gallery, and now he has repeated the experiment at Morley College, London, where three young painters have decorated the refreshment room and the hall with an extraordinarily interesting and lively series of mural paintings. Mr. Edward Bawden and Mr. Eric Ravilious have between them completed the decorations for the refreshment room. These are of mixed subjects: interpretations of Shakespeare's plays, boarding-house satire, the sad muses, and many reflections upon the modern scene. When one thinks what impetus is given to the art of mural decoration by the unusual perspicuity and generosity of Sir Joseph Duveen, one may look forward to the day when architect and painter may combine to find the right spaces for decoration beforehand.



Mural decoration at Morley College. Out of many Theatres, this one is shared between "As You Like It" and "Romeo and Juliet," scenes from which will be recognized. In the centre division Britannia is descending to crown Shakespeare and Ben Jonson

SUBWAY FIRE RISKS

The subway explosions which have done so much damage in London during the last two years are half forgotten, though the causes remain. The City Coroner's report raises the question of fire risks again. It is recommended that all subways should be permanently wired for lighting under the I.E.E. Rules, eliminating all portable lighting; that lead should be used in preference to asbestos for the covering of cables; and that the inadvisability of associating gas and electric cables in the same subway should be considered. There will probably be a Government inquiry into the whole series of problems raised by the dangers which lie so close under our feet and wheels.

ASTRAGAL

ARTILLERY HOUSE: AN OFFICE BUILDING IN WESTMINSTER

DESIGNED BY SIR ASTON WEBB AND SON, AND HARVEY A. DAWSON



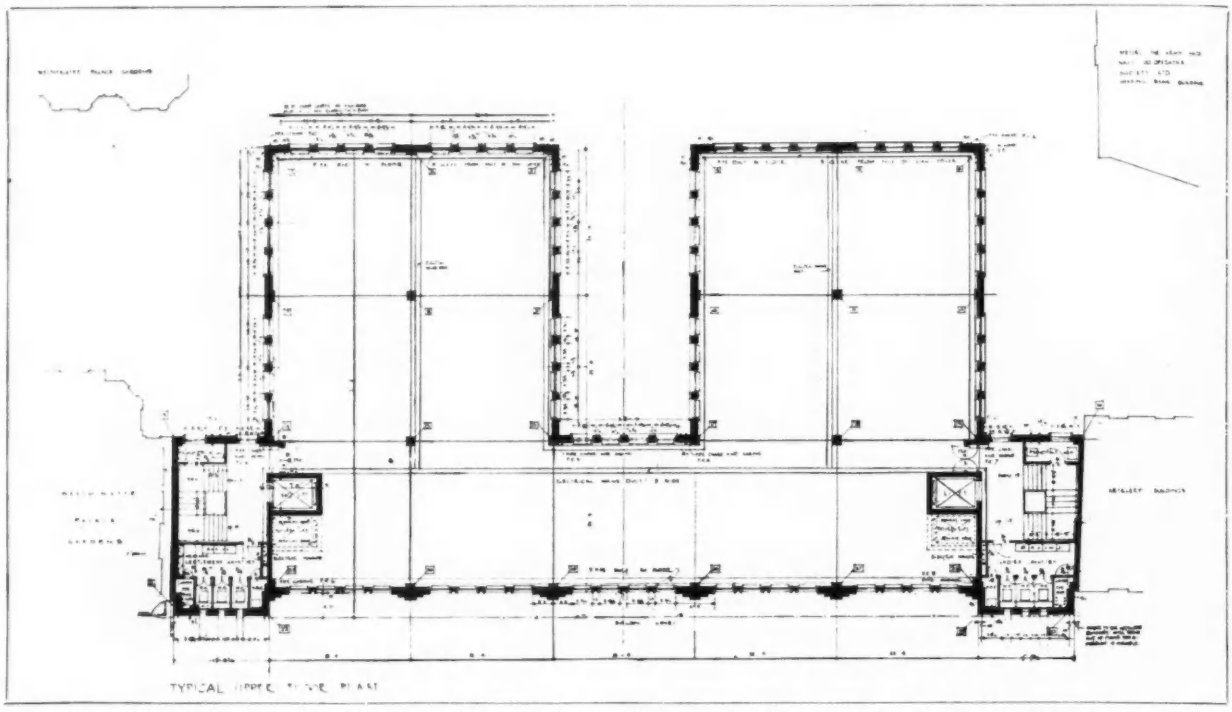
A general view of the front of the building to Artillery Row. Shop-fronts on the ground floor will be the concern of individual tenants. The office accommodation on the remaining floors is of a most up-to-date character. It is interesting to note that the adjoining buildings on either side were found to be slightly out of plumb.

ARTILLERY HOUSE, the subject of these notes, and the accompanying photographs and architects' drawings, represents an enterprise, speculative, in the sense that it was erected to stimulate a potential demand for office accommodation, in a quiet vicinity otherwise given over to residential premises, rather than to meet existent and specific requirements. It occupies a rectangular site, vacant for some years, in Artillery Row, facing the eastern side of the Army and Navy Stores, just off Victoria Street.

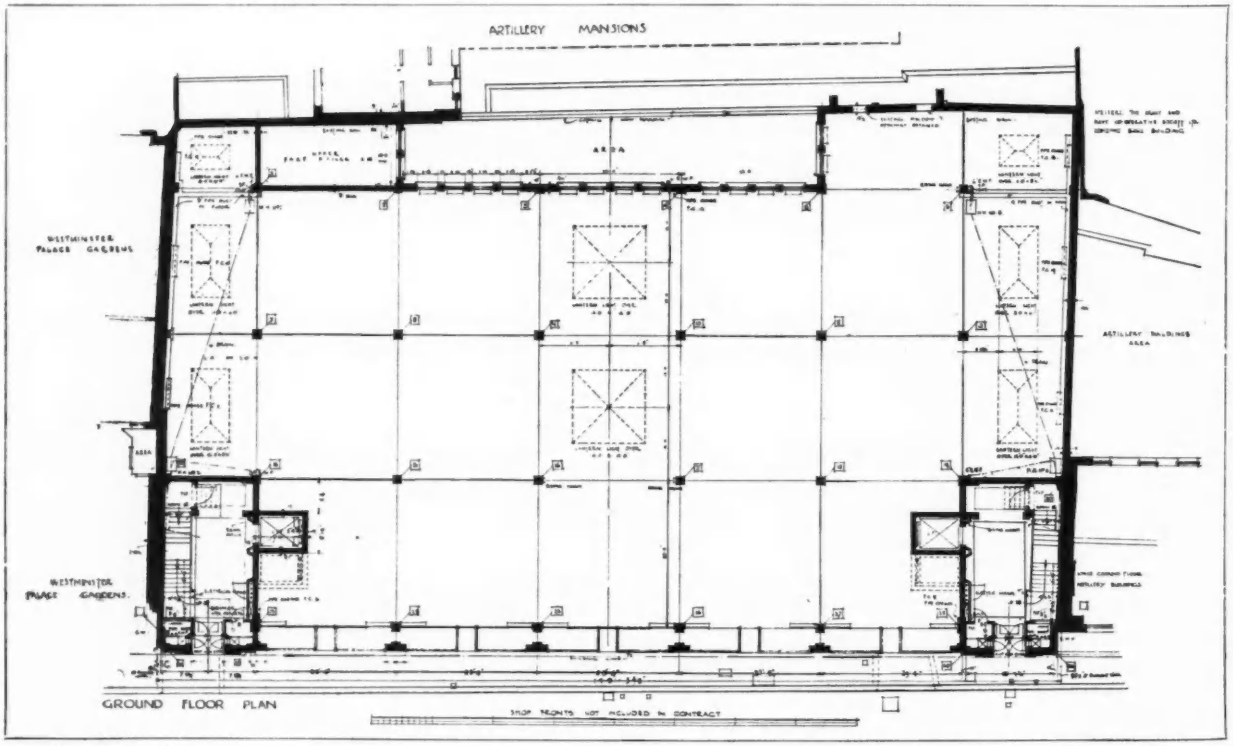
This is a region not hitherto rich in architectural character, and the aim has been to supply at once a challenge to the eye of the passer-by and working quarters attractive to the inhabitant, when gauged by the most modern standards of comfort and convenience. Straightforward requirements; yet the manner in which they have been met discloses that mingling of taste and ingenuity which is the very stuff of workaday architecture.

The eye is undoubtedly taken by the perfectly symmetrical façade, a great Gothic-seeming window, stretching in five bays, divided by buttresses cunningly sheered and tapered, between two tower-like elements, whose narrow, deep, vertical reveals convey a suggestion of lancet fenestration. Buff faience, sometimes deeply moulded, clothes the steel framework on this front, but elsewhere brick forms the outer skin. The steeply pitched roof is covered with rough Westmorland slates. In the two towers, as their very form—although they do not overtop the main roof—and the two arched entrances at their bases suggest, are housed the means of communication from floor to floor—a staircase, a shaft for two lifts, a pipe-duct, an electric cable duct, and lavatories. On the ground floor is a series of shop spaces with, over the shop-windows themselves and concealed by a balustrade of some depth, upper lights that can be opened for ventilation. Above mount seven identical floors, while an eighth, with a range of rooms running the length of the street frontage, is contained and concealed within the roof, being lit from the back. Below ground there is a commodious basement.

The building's outward promise of light rooms is more than redeemed. A glance at the plans will show how this has been brought about. On the ground floor only a small area has been reserved to supply light to the basement, but, above first-floor level, not only does the planning assume a

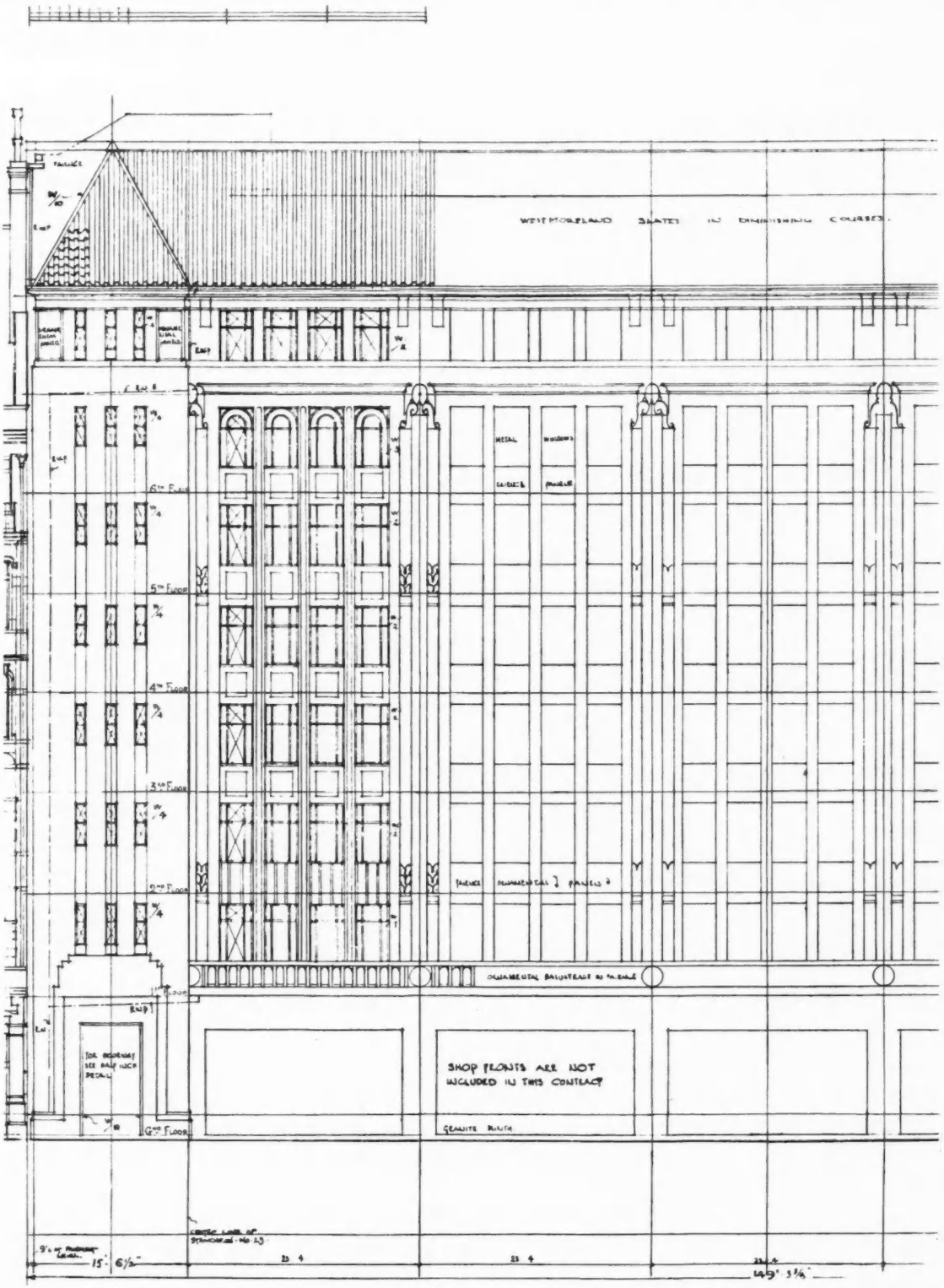


The architects' drawing of a typical upper floor, taken at second-floor level. This shows how the planning is built up from a rectangular unit. There are five such in the range to the street; the limbs are, each, two wide and two deep; the area is one wide and two deep. Vertical communications are concentrated in two tower-like structures at the lateral extremities.



Artillery House, S.W.] [*By Sir Aston Webb and Son, and Harvey A. Dawson.*

Comparison of this ground-floor plan with that reproduced above will make clear the setting back of the upper floors which allows of various ground-floor sections being top-lit by the lanterns indicated. Here only a small area is left at the back for lighting the basement, the whole of the remainder of the site space being utilized for shop accommodation.



Artillery House, S.W.] [*By Sir Aston Webb and Son, and Harvey A. Dawson.*

A portion of the architects' drawing of the street elevation, a photograph of which is reproduced on page 268. There are a basement; a ground floor, designed for shops; seven upper floors, identical in dimensions; and an eighth, in the steeply-pitched roof, this range of rooms being lit from the back. The building is intended to be let off in office accommodation.



Artillery House, S.W.] [*By Sir Aston Webb and Son, and Harvey A. Dawson.*
A near view of one of the entrances, showing details of the faience modelling, including the "artillery" emblem above the arch.

U-shape with a central area separating the two limbs, but by means of setting back on all but the street front substantial areas have been created around the whole block. The result is that every floor can be lit and ventilated from all sides. The lights have, in fact, been carried right up to ceiling level; and standard metal casements are employed throughout. The roofs of the limbs are flat, and the rooms on their top floors have augmented height, and, in one case, a dome—obviously a prospective board-room. Moreover, where the central and side areas occur, lanterns light the ground floor rooms.

If quiet and light are two essentials of modern office accommodation, heating runs it close. This function is discharged by a water system served by vast insulated storage cylinders in the basement, electrically heated during "off peak" hours, in accordance with the most modern practice.

LEICESTER COMPETITION RESULT

THE Leicester Corporation Mental Hospital Committee invited members of the Leicester and Leicestershire Society of Architects to submit designs for a nurses' home at the mental hospital. Premiums of £100, £75, and £50 were offered. Fourteen sets of designs were received, from which the assessor, Mr. J. Kirkland, F.R.I.B.A., has made the following awards :

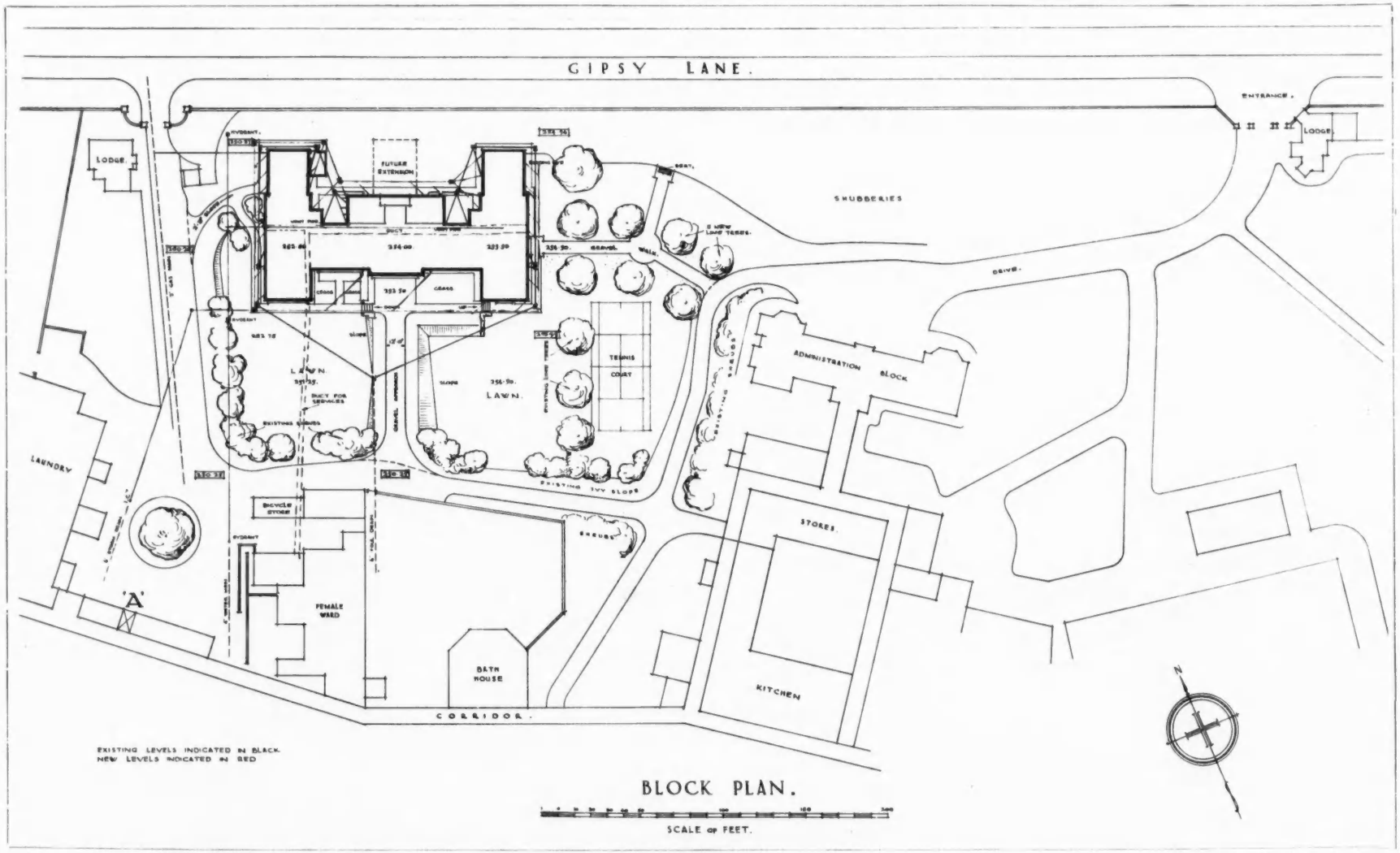
First, T. Trevor Sawday.
Second, Stockdale, Harrison and Sons.
Third, F. H. Jones.

The scheme provides for the erection of a three-story building on a site adjacent to the entrance of the old building on the Gipsy Lane boundary of the estate. Accommodation was asked for four officers and seventy nurses, with a separate bedroom for each; a dining-room, sitting-rooms, reading-room, recreation room, etc.

The author of the winning design has carefully planned the building to comply with the aspect and natural gradients of the site. The gradients have enabled him to restrict the ground-floor bedrooms and sitting-rooms of the officers' section to an economical height, and at the same time to increase the height of the larger rooms in proportion to their size, but still to maintain the first floor at one level.

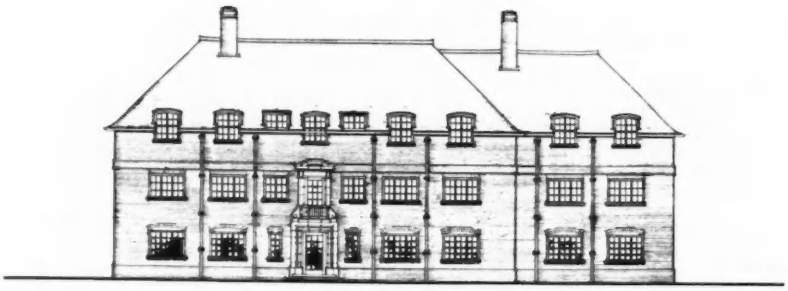
Although one additional staircase to the main central staircase might be considered sufficient for the number of nurses accommodated, two further emergency staircases have been provided, thus giving quick exit from either wing. Night nurses' bedrooms are arranged on the second floor of the eastern wing and are self-contained.

The cost of the scheme is estimated at £22,618.



Leicester Nurses' Home Competition : Winning Design.] [*By T. Trevor Sawday.*

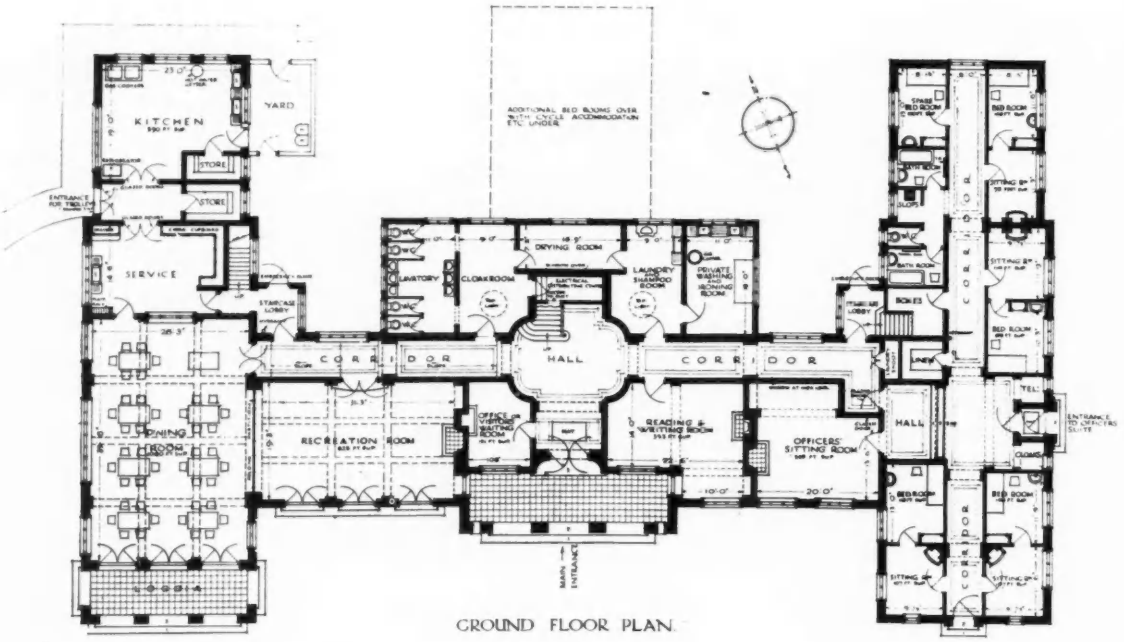
The proposed nurses' home is shown on the north-west corner of the block plan, adjacent to Gipsy Lane. The officers are given a separate entrance, on the south-east front, to their bed and sitting rooms, in convenient proximity to the main north-east lodge entrance and administration block. The entrance for the nurses is in the centre of the south-west elevation. It is approached by a wide sloping walk leading off the existing drive, and bounded on either side by the lawns. It is assumed that meals will be brought along the corridor from the main kitchen to the point marked "A" on the block plan, and thence to the kitchen or service room (see plan on page 276) by way of the drive leading to the north-west lodge gates. The use of this entrance by the nurses would of course give readier access to their home, but it is understood that at present the main lodge entrance only is to be used by them.



EAST ELEVATION



SOUTH ELEVATION

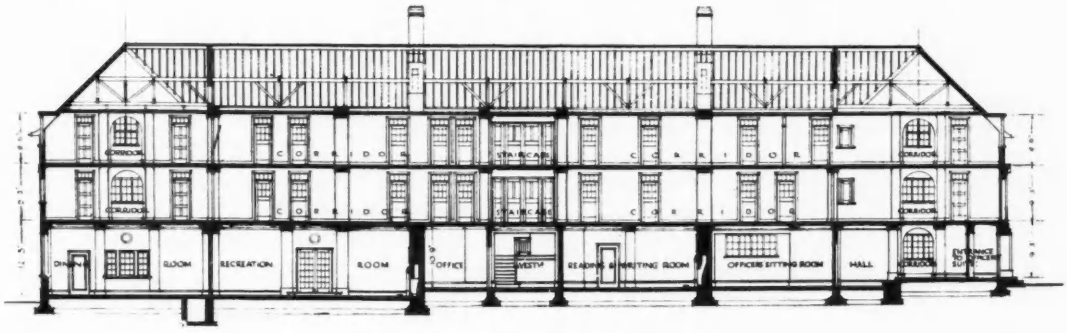


GROUND FLOOR PLAN.

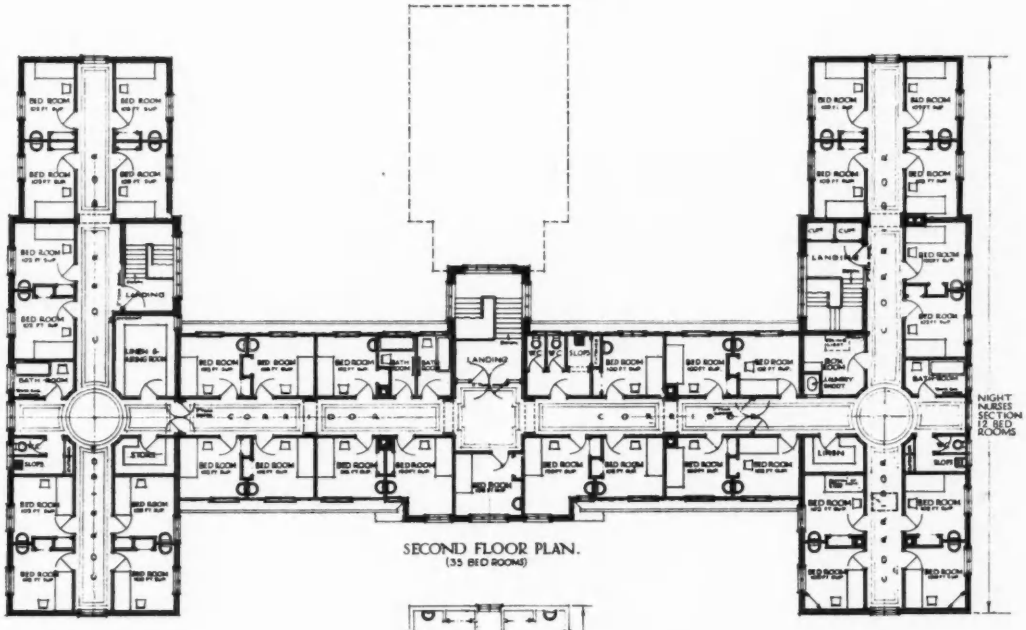
SCALE OF FEET.

Leicester Nurses' Home Competition: Winning Design. [*By T. Trevor Sawday.*

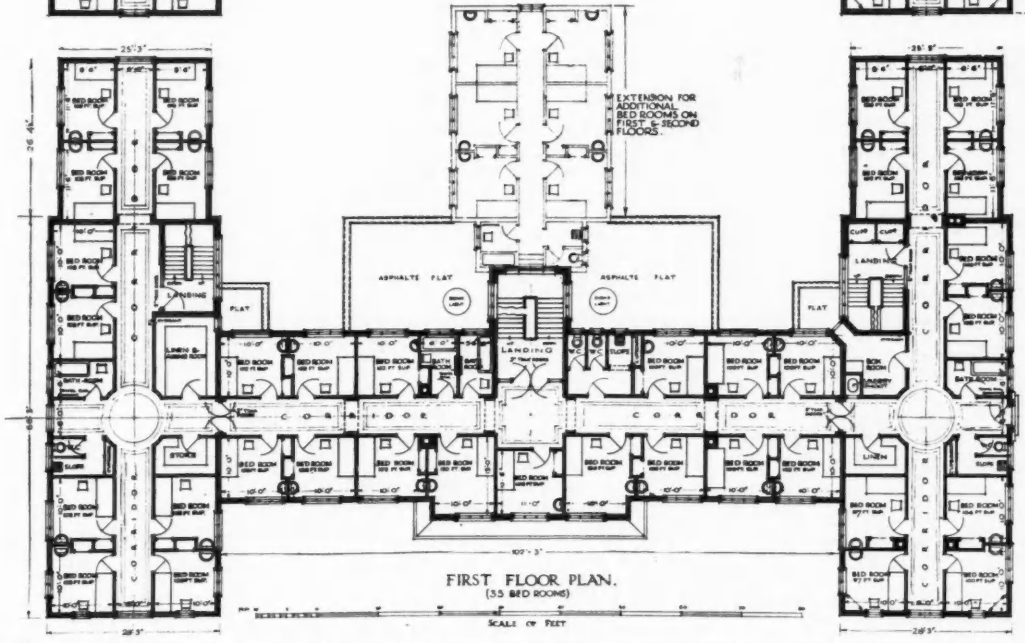
The elevations would be faced with 2⅝ in. multi-coloured sand-faced or brindled bricks, pointed in light coloured mortar; the roofs covered with russet-brown sand-faced tiles, with bonnet hips; and the windows consist of red deal outer frames, with teak cills, filled with steel sashes, frames and glazing bars.



LONGITUDINAL SECTION.



SECOND FLOOR PLAN.
(35 BED ROOMS)

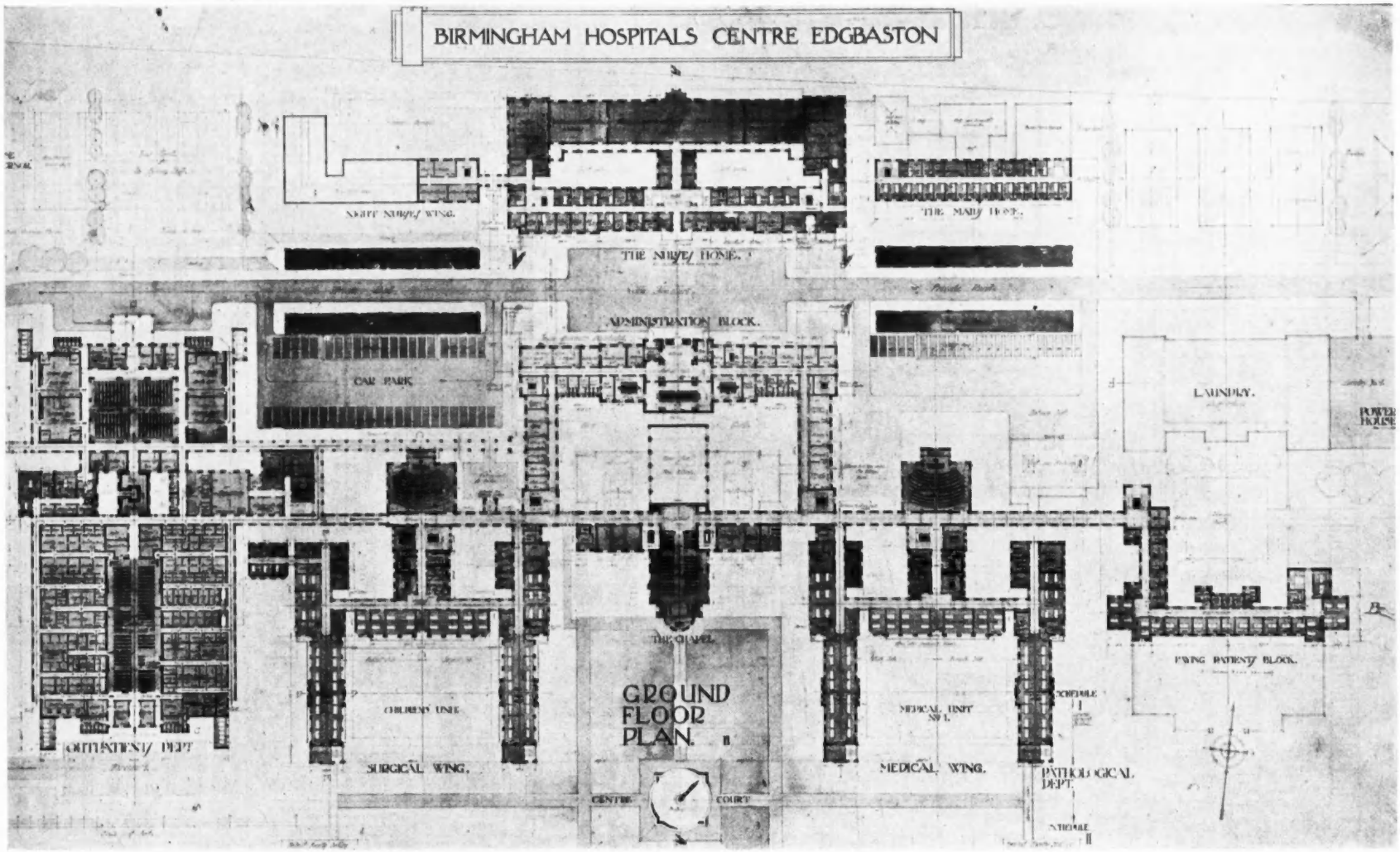


FIRST FLOOR PLAN.
(35 BED ROOMS)

SCALE OF FEET

Leicester Nurses' Home Competition: Winning Design.] [*By T. Trevor Sawday.*

An extension to provide additional bedrooms, etc., is planned to open off the main central staircase on the first and second floors. This would provide space on the ground floor (see facing page) for cycles and other storage, and could be erected without any disturbance to the Home. Kitchen and larders could be extended both to the north and east.



Birmingham Hospitals Centre Competition: The Winning Design.] [*By Lanchester and Lodge.*

Figure nine. The general layout of the nurses' home block and the administration block, showing the relative positions of all the sections, the interworking of which is discussed, in the article continued from our last issue on the facing page, from the point of view of circulatory systems. The winning competitors, recognizing the prime importance of easy circulation, have indicated the various flows by arrows on several of their drawings. This particular figure illustrates the first circulation—that which brings into the hospital all persons and materials concerned in its functions. A second car park is provided to the east, corresponding with the westerly one here named. The kitchen (in the basement) is situated between the administration block and the chapel.

BIRMINGHAM HOSPITALS CENTRE, EDGBASTON

Further Deductions from the Winning Designs

BY E. MAXWELL FRY

In this conclusion of the article begun last week, the intricate circulatory systems provided in the winning architects' scheme are discussed in detail.

THE winning design is spread over a large area; indeed, it may be accounted a defect that the larger units of the hospital are strung out along a central corridor 900 ft. long. This entails a great deal of unnecessary walking on the part of the staff, and it means that connected departments are too far-flung for economical running. These are the defects of an open treatment, and they are accentuated rather than otherwise by the vertical treatment of the hospital blocks with which they are combined.

In other respects the layout adopted by the winners, who have arrived at many of the good points evolved by other competitors, is fused with a more imaginative reading of the practical conditions of the competition and of the possibilities of the site.

Messrs. Lanchester and Lodge have quite definitely stressed the importance of circulation by indicating with arrows the various movements and flows that dictate the detailed planning. It may be possible to arrive at a better idea of how the plan will work by examining these as a series of tabulated circulations than by merely scattering haphazard remarks.

FIRST CIRCULATION

Turning to the block plan which appeared in last week's article (figure two), one sees very clearly that, once the attempt to make a fine central approach is abandoned, everything must be approached from the outer circumference. This undoubtedly adds yards to every travel, but, as we have seen, it creates the quiet central gardens, and at once establishes a certain spiritual quality in the design, which, since the building is to last a long time, is well worth having.

Thus from the circumferential roadway all departments are reached, and it should be noted that each is supplied with a separate little forecourt, out of the traffic stream. On each side of the main entrance on the north roadway are two car parks (figure nine) holding about sixty cars between them.

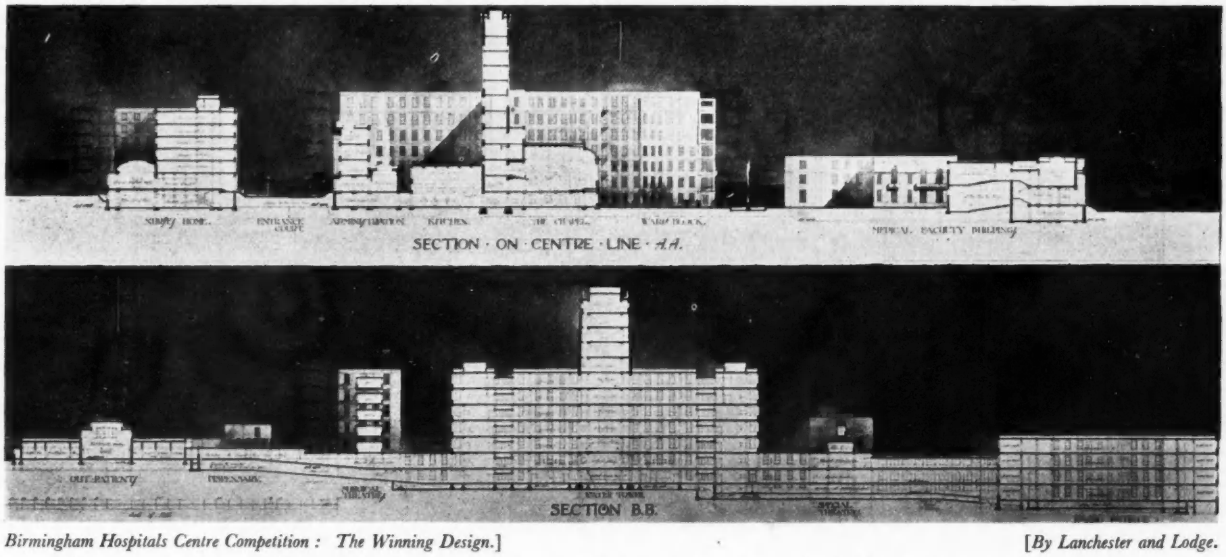
This is the primary circulation bringing into the hospital everybody and everything connected with it.

SECOND CIRCULATION

The next circulation will trace the process of admitting patients. The placing of the outpatients' and casualty departments (figures nine and eleven) is a matter of much importance, for these departments are the centre of the hospital's blood system. As a hospital deals with bad blood, as it were, and turns away good, these departments serve as a sort of inverse filter that lets through the worst and turns away the best.

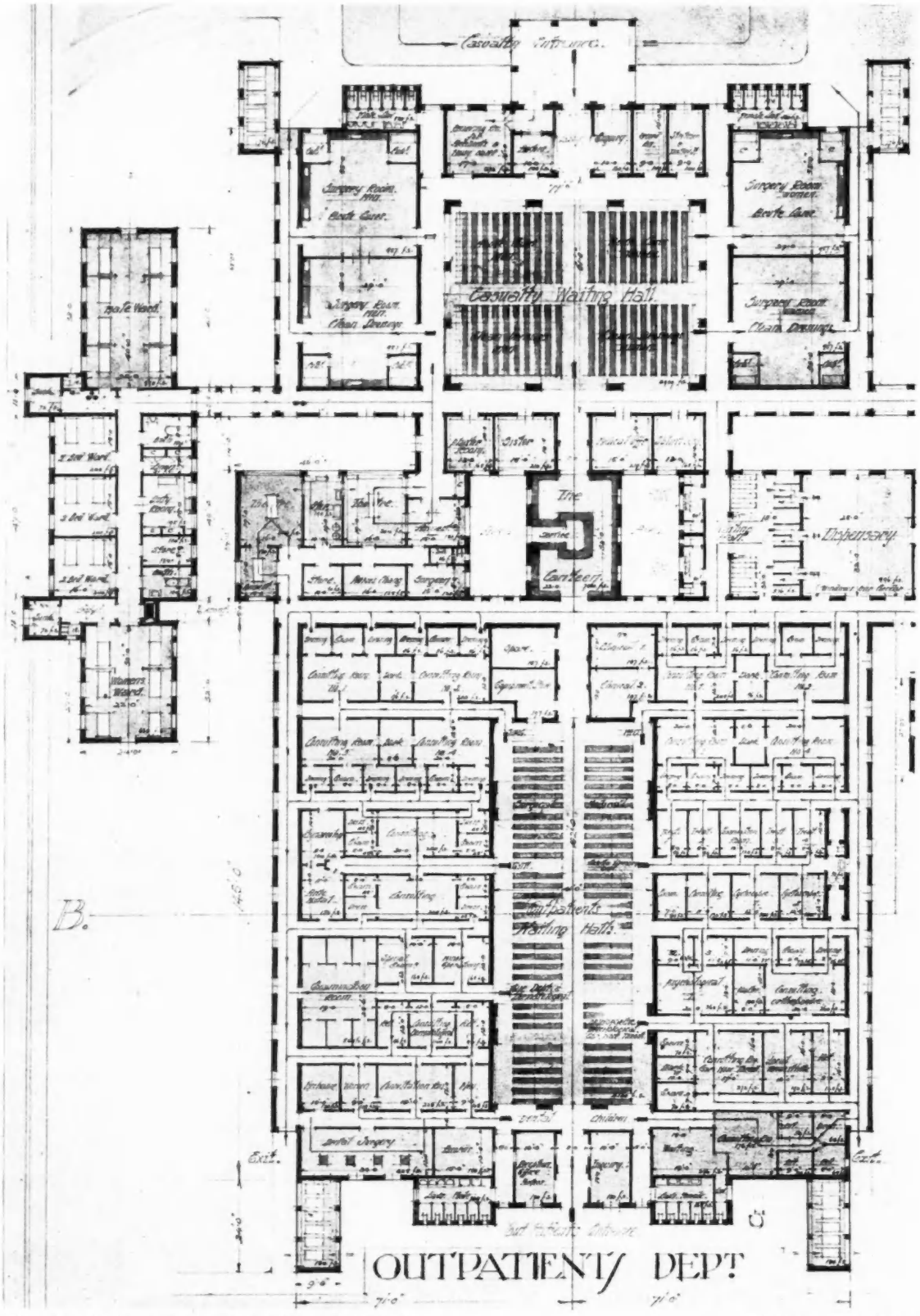
Turning to the enlarged plan of these departments, whose general position is shown on figure eleven, one may see how the filter works. The casualty department is shown above, the outpatients' below, while between them is the dispensary and operating theatre, and to the left the wards of a small hospital. This large unit does indeed comprise a complete little hospital.

The flow enters from north and south, and congregates in the central waiting halls, from whence, male and female, it is drawn right and left through the regulated warren of consulting and dressing rooms. From here the bad blood turns inward to the central corridors leading to the hospital; the



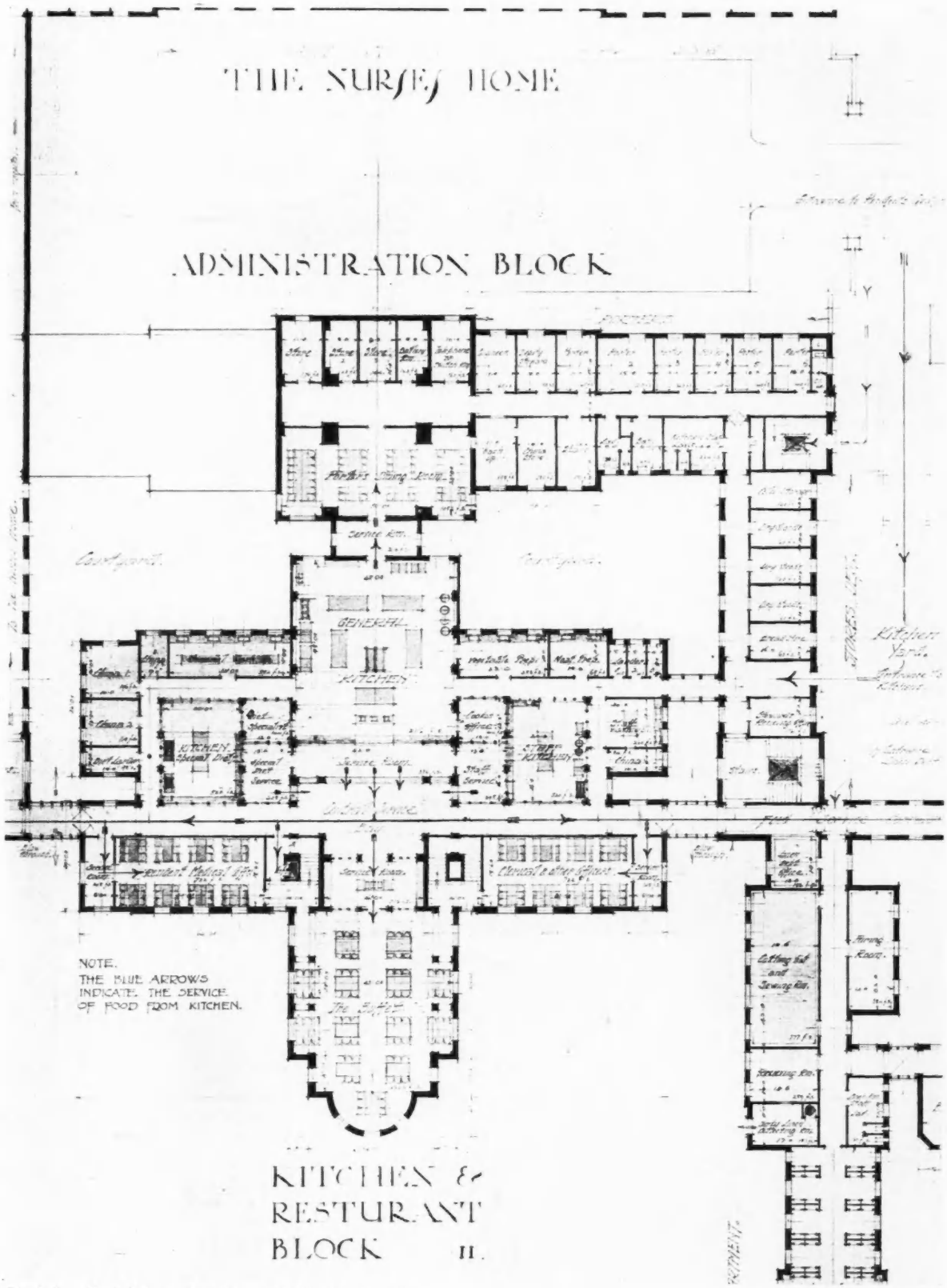
Birmingham Hospitals Centre Competition : The Winning Design.] [*By Lanchester and Lodge.*

Figure ten. The lines A.A. and B.B., on which these sections are taken, can be identified by reference to figure nine. The lowest of the thickened lines in section B.B. show the ramped corridors of communication, containing pipe ducts for the water circulation. The central tower houses the supply tanks.



Birmingham Hospitals Centre Competition : The Winning Design.] *[By Lanchester and Lodge.*

Figure eleven. A large-scale reproduction of the ground-floor plan of the outpatients' and casualty departments, illustrating the second circulation, which is concerned with the admission and disposal of patients. This large unit is practically a complete little hospital. The flows are marked by arrows.



Birmingham Hospitals Centre Competition : The Winning Design.] *[By Lanchester and Lodge.*

Figure twelve. An enlarged plan of the central kitchen, in which the progress of the foodstuffs is the subject of the third circulation, its directions indicated by arrows. The chief means of access is from the eastern car park not shown on this drawing, but situated near the top, to the right. The kitchen is in the basement, and above the buffet is the chapel.

good turns in the opposite directions, and finds its immediate exit; the medium-good may be given short treatment in the hospital immediately attached.

All that concerns the main hospital passes along the ramped corridors which are to be seen on long section (figure ten), and this main flow is disseminated vertically and horizontally, having passed through the filter.

THIRD CIRCULATION

One cannot maintain a very strict analogy, but one may take the passage of food from a central kitchen to constitute an important circulation and place it third. The kitchen block is shown in detail on figure twelve, and its central position, between the administration block and the chapel, is shown on the block plan (figure two) and on figure nine. It is situated in the basement and has an immediate duty to perform in serving no less than four staff dining-rooms.

Food enters from the eastern car park and passes under the supervision of a receiving office direct to the main kitchen, surrounded by its subsidiary departments, and by the kitchen for special diet. The basement corridor is entirely for service. It will be seen enlarged into a central service bay opposite the kitchen, and from here the circulation, having attended to the several dining-rooms, spreads laterally to the lifts serving the hospital blocks; the circulation then becomes vertical, until it is disseminated along the wards. This service is, of course, by means of trolleys.

FOURTH CIRCULATION

The washing of linen is an enormously important item in a hospital. A week in bed is enough to make one realize this fact. This laundry circulation is in reverse, originating in beds and operating theatres, and flowing at first vertically downwards by means of shutes. The laundry plan (figure thirteen) shows the dirty linen entering, and it is interesting to trace the distinct operations of staff, general and foul wash. The plan explains itself so well that further discussion is unnecessary.

FIFTH CIRCULATION

The discipline of the operation theatre calls for planning that results from a close study of circulation. It will be seen on figure fourteen how carefully the staff side is separated from the patient side, and how both meet in the theatre, each having gone through the preparations necessary to an operation. The patient's return, even, is by another exit, since his entry was by way of the anæsthetic room.

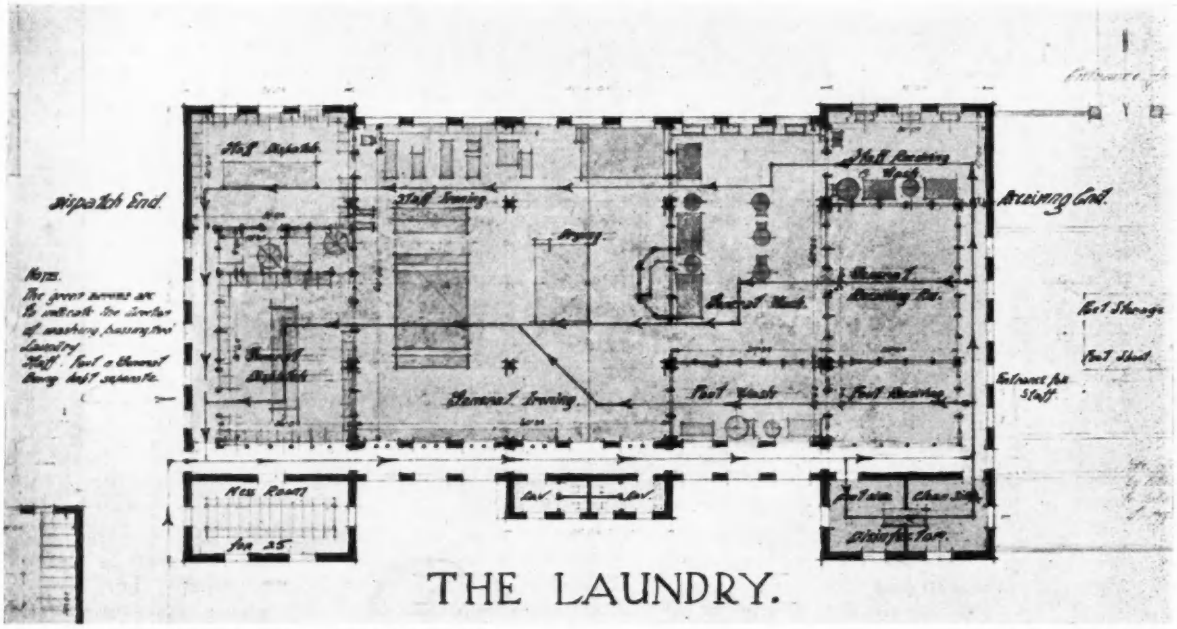
OTHER CIRCULATIONS

These circulations have narrowed their range from the very general to the very particular. Tracing them, one sees something of the ceaseless flow of human beings through the buildings. There are other circulations, of course.

There is, for instance, the steady movement of nurses, doctors and staff off and on duty. There is the other, and lesser, influx of visitors. And there are the silent circulations of water, gas, electricity and sewerage. Low down on the site the boilers are feeding the system of pipes that heat the building and provide hot water. The ducts that carry the pipes may be seen (figure ten, section BB : thick lines) falling back to the boiler, with the tanks that store the head of water high up in the central tower.

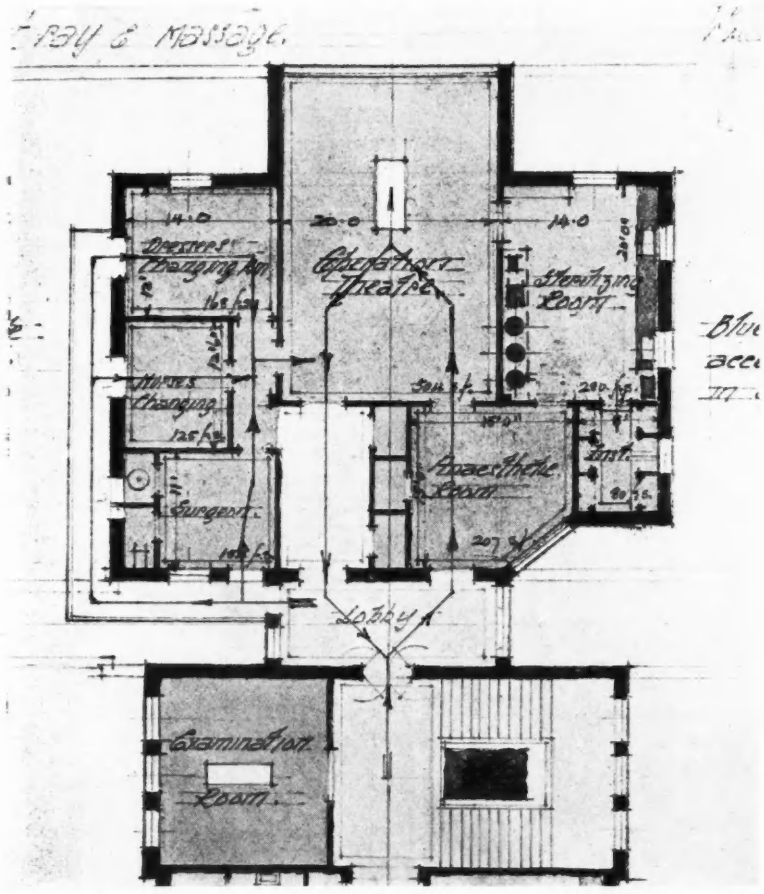
Turning again to the block plan (figure two), one sees more clearly how much the plan gains, not only by its system of circumferential circulation, but by its symmetrical disposition, which seems to regulate the complicated flow along understandable channels. Above all, it must be a matter for general congratulation that these channels that seem so much to follow the lines of least resistance should have been disciplined into the fine symmetry which turns a mixed assemblage of units into a plan and buildings that are together a very fine example of English monumental architecture.

(Concluded)



Birmingham Hospitals Centre Competition : The Winning Design.] *[By Lanchester and Lodge.*

Figure thirteen. The fourth circulation traces the processes of cleansing linen in the laundry. The paths for three categories of washing—staff, general and foul—branching away from and, later, rejoining the main flow, are clearly indicated.



Birmingham Hospitals Centre Competition: The Winning Design. [*By Lanchester and Lodge.*

Figure fourteen. The operation theatre and its accessory rooms, through which the fifth circulation—that of patients and of staff, meeting in the theatre itself—is set out.

TOWN PLANNING AND GARDEN CITIES

THE third of the series of six non-technical lectures on Present-day Architecture was given at the Architectural Association on Saturday. Sir Theodore Chambers presided over a large gathering.

Mr. Louis de Soissons, F.R.I.B.A., S.A.D.G., began his lecture on "The Creation of a Garden City" by saying that the chief reason for the town planner's existence and his chief problem is due to man's incurable gregariousness. The earliest records of Mediterranean civilization showed humanity grouped in comparatively densely populated states, with the country between them so unknown that stories as to its being inhabited by fabulous monsters found ready acceptance. He was afraid a modern parallel to those monsters existed; and they were the long, inanimate dragons, of brick, roughcast and asbestos, that could be seen along our country roads.

The growth of seamanship and sporadic eras of peace made travel easier, and tended to scatter populations, but the growth of raiding piracy (sometimes dignified by the name of war) drove the people together again into compact easily-defended cities, and thus accordance action—this expansion from the cities into the country, and contraction from the country to the cities—had, roughly speaking, continued throughout history. But with the coming of the industrial era, the main centripetal force towards the cities was due to the massing of large bodies of labour in factories employing hundreds of thousands of workmen, and the need for housing them as near their work as possible. There was no broad-visioned planning and foresight—merely the play of supply and demand—and consequently there resulted the ghastly industrial towns in the Midlands and North, and in London's East End.

The modern town planner, the lecturer said, looked upon existing cities as incurable; the only solution was to start on virgin sites and build cities of manageable size, which should be conscientiously planned as self-contained units with due regard to the hundred-and-one domestic, economic, transport, and other questions involved—the neglected and haphazard tackling of which had created the present impasse in older cities. As an example of these planned civic units he drew attention to Letchworth and Welwyn Garden Cities, which, he said, had been not merely conceived, but brought to birth. Both were founded by Sir Ebenezer Howard. It was interesting to note that Letchworth, the first garden city, was built in 1903, on a site of 33,000 acres of land. Welwyn was of much later date; it was begun in 1920 on 24,000 acres of land.

Mr. de Soissons gave a descriptive account of Welwyn Garden City, for which he is principal architect, and illustrated it by lantern slides. Many of these showed the fine old trees in the district. He emphasized the importance of preserving them and stated that only two had been cut down during the past ten years. Many young trees had also been planted in certain roads. Grass verges had been laid out, and could, if necessary, be narrowed for road widenings. It was often the case that people preferred to live on a busy main road, where they could look out upon the traffic. But gradually they were beginning to appreciate the quieter places, such as those afforded by the cul-de-sac type of development, by which houses were built in "closes." This was certainly ideal from a "safety first" point of view, because it provided ground where children might play together, without danger from fast-moving traffic.

Showing the Welwyn Theatre, he explained how the Georgian treatment of the exterior conforms with a predetermined scheme which embraces the whole of the shopping and commercial areas of Welwyn. Internally, however, no specific style was required, and it was designed in the most modern manner. The acoustical features had been employed as new motives of decoration.

He said, as a result of years of concentrated thought, they had built up a Garden City which they believed to be a solution of the evils of the towns as they had grown up and developed at the present time.

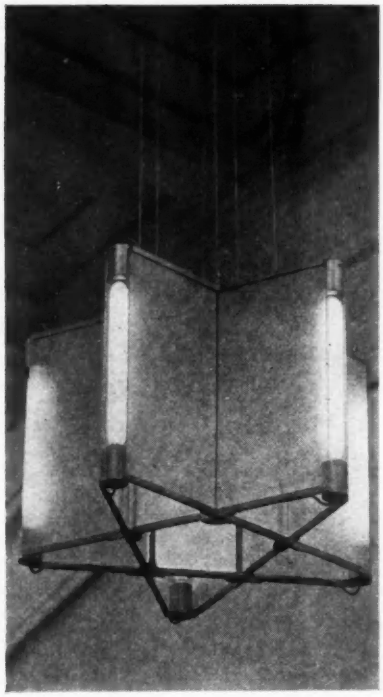
LIBRARY AT THE POLYTECHNIC, W.1

DESIGNED BY FREDERIC E. TOWNDROW

THIS is for the most part an internal construction on the site of the old architectural studios, which were, in transverse section, like a semi-octagon, with the top side for the ventilation ducts, the two sloping sides glazed with large sheets of patent glazing, and the vertical sides of brick walling. The new work is, in reality, a large semi-circular lay-light beneath a concrete roof. The coffers are of fibrous plaster, though all the projecting members are structural. Unfortunately, however, the radial centre of the existing steel supporting arches was quite close to the ground; and, as vertical bookcases had to be housed at the sides, the junction of the vertical with an arched form—well above its springing—provided a difficulty in the design.

The library is planned to accommodate both lending and reference departments. It is on the open-access system, and the mechanism and arrangement are of the standard public library design. All the joinery is of Austrian wainscot oak, oiled and waxed, giving a pleasing golden effect.

The electric light fittings were specially designed to give a maximum efficiency compatible with a minimum of glare. All parts of the lamp serve some purpose. It consists simply of a group of five vertical tube-lights, arranged in the form of a pentagonal star. The glass is introduced to break up the direct view of the bulbs. The glass plates are arranged to slide out for cleaning, yet as all the faces are vertical they are not likely to catch dust. The form of the fitting suggests five open books facing each other. This is appropriate to a library, though not the original idea underlying the design.

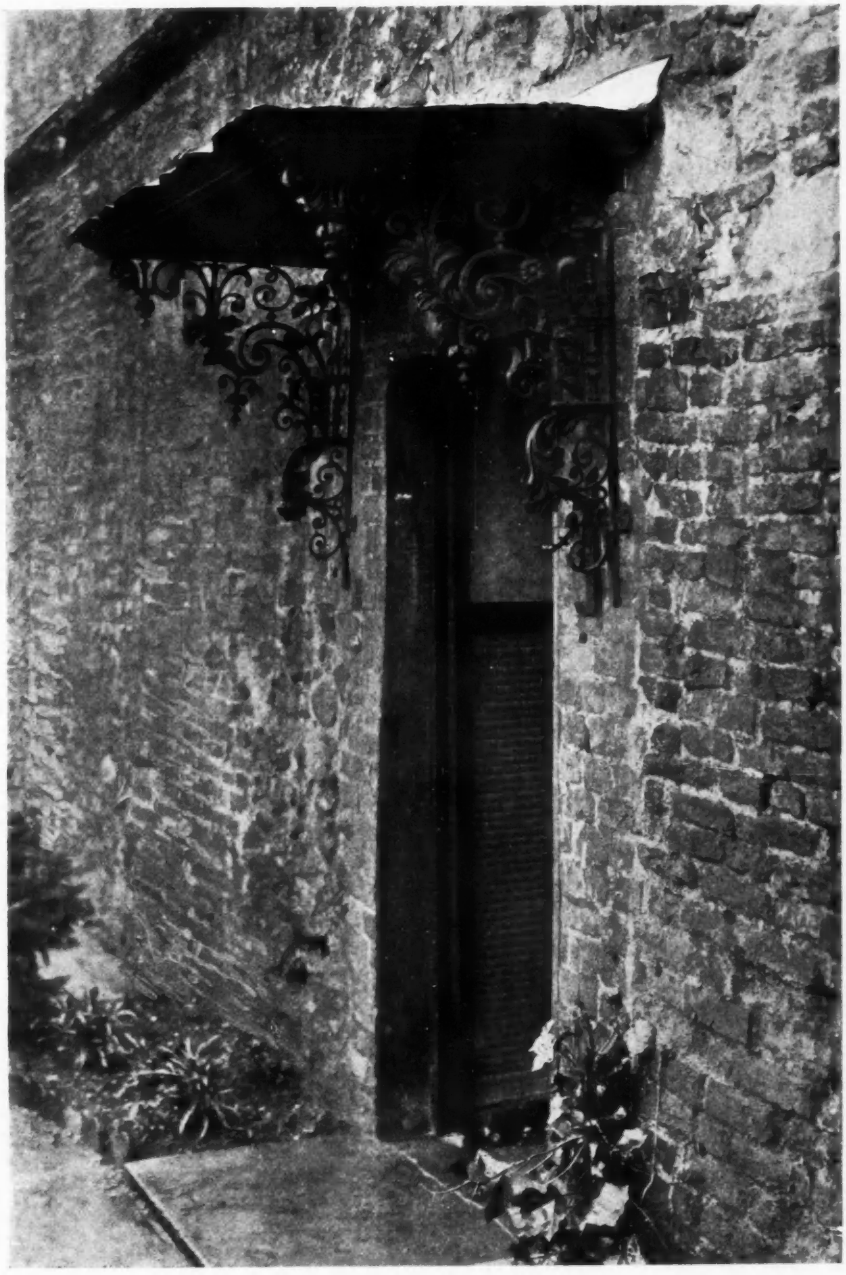


One of the lamps, specially designed by the architect. The peculiarly appropriate form, suggestive of five open books, was arrived at fortuitously in the development of the pentagon star idea.

The flooring is of cork tiling, ½ in. thick, to the architect's design, which makes a noiseless floor of a good colour. In fact, much of the effect in this library is obtained by colour. The slight golden tone of the oak is enhanced by the warmer colours of the floor and a sparing use of bright yellow in the edges to the coffers. Also a warm cream is used to pick out the main structural members of the ceiling, and to carry this farther the ceiling air-vent panels and the lighting fittings are lacquered in gold.



An interior view of the library, laid out to hold 25,000 books, on the first floor of the Regent Street building. The fittings are in Austrian oak, oiled and waxed to a golden tone ; the edges of the ceiling coffers, formed of fibrous plaster, are edged with bright yellow ; the ceiling grilles and lamps are gold lacquered. To this range of colour the warm cream used for the main structural members supplies a harmonious groundwork.



ENGLISH PRECEDENT No. 102

DOORHEAD,
ST. ANNE'S HOUSE,
KING'S LYNN,
NORFOLK

King's Lynn is full of the remains of a flourishing period of Georgian architectural activity; some of them well preserved, and some, unfortunately, as incongruously situated as this most delicate piece of wrought ironwork.

Anyone who has ever designed in wrought iron will recognize how valuable a possession such a work can be. This would seem to be in danger of being carried away or sold unless some responsible body takes care of it at once. —[E. MAXWELL FRY.]

JAGO *v.* SWILLERTON AND TOOMER

In the matter of the Arbitration Act, 1889

BY KARSHISH

This is an action before an arbitrator, brought by Colonel Jago, J.P., jointly and severally against the builder and architect, for damages for the collapse of a village hall. Mr. Chawlegger, K.C., and a Junior represent the plaintiff; Mr. Twistle the defendant Swillerton, and Mr. Pitfall, K.C.—with him Mr. Wrackem—the defendant Toomer. Mr. Pitfall is now about to bring his closing address, with which the third day of the hearing opened, to a conclusion.
Though the case related is true to life in every particular, the characters named are fictitious.

vi: Mr. Twistle's Closing Address

THE Arbitrator having, in reply to a remark of Mr. Pitfall's, told Counsel that he must **use his own judgment** in pursuing arguments destructive of the charge of negligence against his client, Mr. Pitfall went on as follows :

Then, sir, I will add nothing to what I have said on the subject of negligence, for my judgment directs me not to offend your understanding by further labouring the matter. Neither, sir, will I **insult** you by arguing that the continued violent—or vigorous—dancing on the buckled floor—which it is agreed caused the collapse—was **not** proximate to and directly flowing from the omission to remove the wedges. I will rather leave it to my learned friend to offend you more deeply, by urging that it **was** and **did.**

Mr. Chawlegger : Thank you. I am much obliged.

Mr. Pitfall : My friend is very welcome. No, sir, I will confine myself merely to reminding you of the evidence you have heard from both sides of this table, and submit that that evidence proves that the collapse of the building was **not** proximate to and did **not** flow directly either from the omission to remove the wedges or from the buckling of the floor, but was directly caused by the negligent, callous, or wilfully mischievous act of the plaintiff in persisting in violent ill-usage of the building until it was gradually reduced to a condition of instability and fell down; and that, **therefore,** no charge of negligence can lie against the defendants. **So far as the defendants,** or either of them, are concerned, sir, the collapse was due to *vis major*, and I submit, Mr. Arbitrator, that on the grounds of *vis major* **alone**—and exclusive of the whole of the facts, destructive of any charge of negligence which I have laid before you—the defendants are jointly and severally exculpated. *Vis major*—which, together with the Act of God, or of the King's enemies, is by the immemorial laws of these realms, outside all contracts—is defined as " an inevitable accident in respect of which persons ordinarily liable would have no remedy over." The accident in respect of which the defendants had no remedy over was the amazingly remote coincidence of the period of vibration of the walls happening to synchronize with the rhythm which a horde of drunken and excited villagers chanced to adopt in dancing a particular dance. Mr. Arbitrator, I present to your attention a certain fact conclusive of my contention that this accident was not merely **remote,** but unforeseeable by the most active—I might even say **" diseased "**—imagination; and not merely **unforeseeable** but, even **now,** when all the facts, even to the analysis of a scientific expert, are before us, still remains barely comprehensible and almost unbelievable. That fact, sir, is that the building would not have collapsed **if one only** of the contributory coincidents had been lacking; namely, the unusual use of maple flooring instead of any other; the special close pressing together of the boards; the leaving in of the wedges; the dancing of the gallop instead of any other dance, and violently and at a certain rhythm instead of any other rhythm; the particular thickness and height of the walls and depth of the footings—instead of any other thickness, height or depth—and the consequent coincident period of vibration of the wall; and, lastly, the inconceivable circumstance that, as a climax to this amazing string of coincidences, the building should be given up to the ungoverned liberty of persons who, either from the density of agricultural wits or from drunken frenzy, or both, proceeded, by protracted stages, gradually to dance the place down on their own heads—which, in fact, only by divine providence did they escape doing. Mr. Arbitrator, if there ever was an accident to a building over which architect and builder had no remedy and which accident **for them,** therefore, constitutes *vis major*, the collapse of Grastopen Village Hall was such an accident. An accident more completely beyond the defendants' remedy cannot be imagined. No village hall ever was, or is likely to be, treated with the mischievous ill-usage with which the plaintiff treated this one. I say " the plaintiff," Mr. Arbitrator, because the responsibility is directly his. Not only were the persons he permitted to knock the place down his private guests, whom he invited to the hall to hold their annual jollification and celebrate their squire, but he instituted and maintained the riotous disorder of the proceedings by a free gift of whiskey. I do not know what my friend's idea of an ordinary dram of spirits may be—and two dozen bottles divided equally among three hundred and twenty persons does not, I admit, suggest general intoxication—but we know that beer, and porter, and whiskey and all sorts was in it, quite apart from these mischievous two dozen bottles; and the sort of equal division which is represented by struggles to the death—of the whiskey—for whole bottles of it in the middle of the dance-floor, is, I submit, a clear indication of what took place, and establishes, sir, that when I described the proceedings as a " beastly drunken orgy " I was not overstating facts adduced in evidence. How else, sir, are we to understand the continued dancing on the buckled floor by these guests of Colonel Jago's, who remained oblivious of the walls wagging in and out in time with the music, and of the flags bobbing and curtseying on the roof-timbers, and of the portrait of their host decked out in full regimentals and eyeglass——

Mr. Chawlegger : That was not given in evidence.

Mr. Pitfall :——portrait of their host, possibly in full regimentals and eyeglass or possibly naked, flapping and jaggering against the wall? The plaintiff's witness, the magnificent potato merchant—and I freely admit, sir, that no potato merchant I have ever known had such an astounding gift of language—told us all about it; how the dancers, mad with whiskey and joy, in the springiness of the floor, were lepping and cursing and yowling and screeching and capering—in drunken oblivion of the fact that they were knocking the place down—till they could not hear the music for the

din, nor know which moment was going to be the next with all the spinning and whirling and kicking there was to it. Sir, was there **ever** such a village dance since this world began? Or, if there ever should be, will there **ever** be such a description of it as we heard from Mr. Padrig O'Hara? Padrig is not drunk, but he "has drink taken"; he inflates himself to the lightness of a balloon by successive bottles of ginger beer; he lets a great yell, gives a great stamp of his heels and rises like a lark to the ceiling, adroitly wafted on his heavenward way by a friendly kick behind! What Mr. O'Hara did, sir, it is obvious the others were all doing, although they might not be able to give so praiseworthy an account of their several performances; and, sir, it is **this**—this unheard-of, monstrous, preposterous, unbelievable enormity by Colonel Jago's drunken and irresponsible guests—which my learned friend is calmly asking you to say was a direct, proximate effect flowing from the omission to knock out a few wedges.

Sir, I have done. With confidence I place in your hands the meting out to my client of that justice which the humblest of His Majesty's subjects can claim against the most proud, wealthy and powerful of them. But there is **one** thing, sir, which I ask you not to lose sight of among the many facts and the many submissions which it is your duty to sort out and weigh. That thing, sir, is the **painful**—and I may perhaps add **pathetic**—position in which the defendants are placed. **Both** are humble, hardworking bread-winners; of their other characteristics which will commend them to you I need not speak, for you have seen them and have heard them; **but,** sir, speaking for my client, I ask leave to say that any award that finds him negligent, means to him just this one little thing: absolute and complete ruin. I am not, sir, referring to financial ruin: a poor man who has made his own way by integrity and hard work can, when broken, start again at the foot of the ladder and again laboriously climb to a position of security and self-respect—I am referring, sir, to the ruin of his **professional reputation.** My client's practice is confined to a small district in the provinces. He is not of such a professional standing as to hope for employment outside it. He depends for his livelihood upon the confidence, esteem and goodwill of his neighbours, and he is beset by rivals, many of whom are unscrupulous rivals. Every particular of his professional enterprises and private doings is of public interest in a society which has not enough intelligence to find interest outside their own and their neighbours' affairs; and a pronouncement from **your** lips, sir, of professional dereliction from duty—of guilt, will cast my client into ignominy and contempt—in a place where ignominy and contempt spell destruction—to the triumph and aggrandisement of the plaintiff. For, sir, **what** is at the back of this hounding down of humble, hardworking, independent-spirited men by this wealthy and proud ex-tallow-boiler, spurious Colonel and self-acclaimed Squire, the plaintiff, who has, with such brazen arrogance, strained the sense of all law and justice in bringing this action? Sir, you have **seen** Colonel Jago; you have **heard him** under cross-examination; on **his** behalf and at **his** instigation you have heard my friend attempt to cast reflection upon the character and motives of the aged rector of Grastopen parish church, and you have heard, sir, not I fancy without emotion, the reverend gentleman's story of the coarse, underbred, bullying interferences he has had to endure——

The Arbitrator: Colonel Jago, remember yourself.

Colonel Jago: Damn! . . . Dirty swine!——

The Arbitrator: Leave the room.

Colonel Jago: Mr. Arbitrator, my feelings——

The Arbitrator: Leave the room, sir.

(There was an ominous silence as the plaintiff, with trembling hands, muttering lips, and blanched and twitching face, collected his papers and blundered out of the room, leaving the door open.)

The Arbitrator: Now, Mr. Pitfall.

Mr. Pitfall: I was about to submit, sir, when I was interrupted, that the plaintiff is actuated in bringing this action by **vanity.** For a man in his position of bolstered aggrandisement, to build and then to have the building immediately collapse on his hands by reason of his own negligence and the mischievous stupidity of his guests, and for it to be known that he had got to pay for his stupidity—would be intolerably humiliating. The great Squire of Grastopen, sir, is supreme in the little realm he has bought and which he wears, like the hat he cocks on the side of his head, for all to observe and admire. The money is nothing to him; **he** does not—like the poor man he pursues—have to produce, in order to live, the careful, intricate drawings and specification you have seen, and chase about after bricklayers and carpenters for six months, and write scores of letters, for a wretched fee of £170, of which expenses and taxes eat up a good half. It is his tin-pot **dignity** Colonel Jago is concerned for. He can **well** afford to indulge his vanity, and it is this merciless indulgence of his vanity which has brought us together in this room, for—**mark this,** sir—having brought his action with the disastrous consequences for him which I confidently hope, he still will remain the **proud squire. Not** any humble builder and architect will have put him in the wrong; it will be the mischievous and iniquitous devices of the law, and the obtuseness of an arbitrator sitting in London, that will have been too much for **him.** No award you will make, sir, can more than touch the dignity or ruffle the bank-balance of Colonel Jago. He secured himself in the **one thing he esteems**—his swaggering self-importance—when he issued his writ against the defendants.

Sir—Counsel concluded—I have now only to thank you for the patient hearing you have given me.

The learned Pitfall, who had been speaking for an hour all but four minutes, here briskly refreshed himself with his handkerchief, glanced at his watch, and whispered a word aside to Wrackem: he was already thinking of his next case. He looked round suddenly, however, at a touch on his shoulder, to find Toomer stretching towards him across Wrackem's back. Pitfall stared for a moment, astonished at the countenance presented to him, and then realized that Toomer was offering to shake hands. Pitfall did so with particular cordiality, as, for the moment, he had fancied Toomer was ill. Toomer's grip was moist but fervid. "Thank you, sir," he whispered, "**thank** you"; and the poor man's worried eyes suddenly cocked and filled.

The case, however, was not finished by any means. It was now Mr. Twistle that the Arbitrator called upon to address him on behalf of the defendant Swillerton.

Mr. Twistle was a short, bald man with a bulbous head, pallid face and the sagging cheek-pouches of a glass-blower flanking a rose-bud mouth. His language was colourless, his voice low, his utterance sibilant and suety; but his heavy and authoritative manner carried an air of serious conviction based on vast knowledge, and was impressive. He began by telling the arbitrator that he entirely associated himself, and was in entire agreement with, "my friend who is with me" (meaning Pitfall) in his setting forth of the common grounds of agreement of the parties and of the circumstances antecedent to and attending the collapse; and he also entirely associated himself with the facts and arguments, exculpating the defendants, submitted by his learned friend. He went on to recapitulate them as follows: That the omission to remove the wedges was contributory to, but not the cause of, the buckling of the floor; that the buckling of the floor was not the cause of the collapse of the building; that his client, the defendant Swillerton,

was given no opportunity of making good the buckled floor, and that the plaintiff was, accordingly, estopped from any other claim than the cost of making good that defect; that the behaviour of the floor in buckling was entirely without precedent, so that no man, however reasonable and prudent, could foresee or guard against such buckling; that the omission to remove the wedges was not due to any act of gross negligence nor to habitual acts of trivial negligence on the part of his client, and that the collapse was due to the negligence or wilful act of the plaintiff which, so far as the defendants were concerned, constituted *vis major*.

But, Mr. Arbitrator—said Twistle—completely removed as both the defendants are from any complicity with legal negligence, I have to submit that the circumstances of this case banish my client even more remotely beyond the limits of any such implication than they do his co-defendant. I have to press this point because my learned friend has, if he will pardon me, strained the sense of the matter in the opposite direction and made it appear that if there should be the least doubt of the complete exculpation of the defendants, then that doubt is directed upon my client. I do not suggest to you, sir—I should be ashamed to suggest to you—that any ground for imputing negligence lies at the door of the defendant architect, Mr. Toomer, but I do suggest, sir, that such an imputation against my client would be even more extravagant. What, sir, were my client's obligations; what has been his performance? My client contracted to build soundly and skilfully with good materials, according to the accepted standards of sound and skilful building; and further to build according to the true intent and meaning of such drawings and specifications and instructions as the architect would supply and give to him, and to follow those instructions, and to carry out the whole work in a workmanlike manner, whether all details of it were specifically drawn or described in the instructions supplied to him, or not. Those, sir, were my client's obligations, and you have heard it given in evidence by the plaintiff's own witnesses that he not only performed the whole of those obligations, but that his performance of them was as good as anything the mature experience of the plaintiff's own technical witness had ever before seen. Mr. Arbitrator, what more could my client do in justification of his reputation of fifty years' standing, and in the performance of his duty under this contract? The plaintiff says he should have removed the wedges; but that duty only became apparent after the floor had buckled, and, as my learned friend this morning reminded you, the proving of a defect cannot set up an anterior obligation; the obligation must exist before the act or omission giving rise to the defect. No such obligation existed. In following the established custom of the building trade in making use of blocks and wedges and leaving them in place, my client was acting as a prudent and reasonable man would act, and, therefore, under the famous judgment of the late Baron Alderson, quoted by my friend, no charge of negligence can lie against my client.

The peculiar properties of American maple flooring which led to this entirely unprecedented buckling of the floor were known, and could be known, to nobody concerned except, Mr. Arbitrator, the defendant architect, who by a certain personal experience had become in a limited degree aware of them. The architect was the person whose authority was in every detail binding upon my client who was otherwise under obligations to work according to established custom; and any negligence which might conceivably be involved in the omission to remove the wedges cannot lie at the door of my client. If the architect's experience was not sufficient in kind or degree to make him aware of the risk of the floor buckling, then, I submit, neither of the defendants can be touched by a charge of negligence; but if it was—and so far as it was—sufficient, then negligence, if any, consisted in the architect omitting to warn the builder or to direct the removal of the wedges, and negligence can lie at the architect's door only.

My learned friend who is with me tried to urge upon you, Mr. Arbitrator, that those blocks and wedges, of which we have heard so much, are of the nature of tools. I do not think, sir, that you can have been much impressed by what my friend said on that subject. My client, who alone of any of the witnesses who have appeared before you is entitled to express a decisive opinion upon that point, told you in the plainest terms that such blocks and wedges are not tools. My friend tried to get from him an admission that if the wedges had been of iron they would have been tools; but my client in his replies made clear that any such idea was fantastic. In this practical opinion he is supported by learned authority, which describes a tool to be a mechanical instrument. The applicable definition of the word "tool" in *Webster's International Dictionary* is "an instrument, such as a hammer, saw, plane, file and the like; any instrument used by a craftsman; as the tools of a joiner, smith, etc.; a chisel, cutter or instrument that dresses work." It is clear, therefore, that these unwanted bits of roughly shaped wood were neither tools, nor in any degree of the nature of tools. They were part of the usual constructive elements of a boarded floor, and my client swore, and the defendant Toomer admitted in cross-examination, that such wedges might be, and frequently are, made use of as fixings for skirtings. Even if my client had admitted under cross-examination—as he did not—that these wedges were in the nature of "false work"; and supposing also—what my learned friend did not make clear—namely, that one and the same object can at once be "false work" and in the nature of a tool, what would the establishment of these wedges as "false work" amount to? It would amount, sir, to establishing that the wedges were an element of construction under the specific direction and authority of the person responsible for direction—to wit, the architect; for, as I need not, Mr. Arbitrator, remind you, the design of "false work" is an important duty of those responsible for engineering structures, and it is in connection with engineering structures that the term "false work" is alone used. I submit, Mr. Arbitrator, that my learned friend has completely failed to show that my client, in making use of the wedges and leaving them in situation, was doing otherwise than a reasonable and prudent builder, following established practice according to the requirements of the contract, would do; and I further submit, sir, that the architect defendant knew perfectly well that my client would, in following established custom, make use of such wedges and leave them in place; and that in giving him no directions to the contrary he, in effect, did in fact sanction the fixing of the wedges, and, by drawing a final certificate, formally approved of their use.

What, Mr. Arbitrator, is the position of a builder who contracts to build according as the building owner's accredited agent—the architect—shall direct, when—after that builder has exactly performed his obligations to build in all details as the architect has directed—failure results? Is the builder to be regarded as responsible for that failure? Can negligence be attributed to him for diligently performing that which he was under contract to perform? It has been said, sir, that it is not the business of a Judge to give justice, but to administer the law; but here the law is on the side of justice. It was decided in *Rogers* v. *James*—and the same principle was laid down in the judgment given in *Leicester Guardians* v. *Trollope*—that when an architect, under and within the limits of the authority given him by a building contract, decides any question and directs the builder in any matter, then—whatever cause for action the building-owner may have against the architect in respect of that decision—such decision is final as regards the builder, and

the building-owner has no cause of action against him.

The same principle was enunciated also by the late learned Judge, Mr. Justice Erle, in the case *Turner* v. *Garland and Christopher*, which my learned friend referred to. My friend points out that his client had no opportunity of seeing that the defect of the buckled floor was made good, because he was never informed of that defect by the building-owner. **That,** sir, is as it may be, and I do not suggest for **one moment** that the failure of the defendant architect to notify my client of the defect was due to any lack of diligence on his part; but it is my duty to remind you that—**as between the defendant architect and my client**—it was to the **architect,** and to the architect **alone,** that my client had to look for notification that the floor had buckled, and for orders or directions for making good that defect. Such order or direction my client never received. Had he done so, he would have restored the floor and I, sir, should not now be addressing you in this room. My client explained to you, in evidence, the steps he would have taken to restore the floor had such opportunity been given him, and you were able to satisfy yourself that my client's estimate of three pounds ten shillings as the cost of making good was a close and reasonable estimate. The defect, therefore, was one of those minor defects of which a certain number must inevitably reveal themselves in the most carefully and soundly built building, and the making good of which are included for in the price which a builder tenders and which forms the money-consideration of the contract. That liability of the value of seventy shillings my client would not have disputed, but his liability ended **when**—by the wilful and mischievous act of the plaintiff—all possibility of liquidating that liability ended.

Mr. Twistle next submitted that as the building had in fact been completed—and certified by his architect as having been completed—before the date of the collapse, the clause in the contract fixing penalties for delay in completion had lapsed; and he urged that the plaintiff was, therefore, not entitled to add the weeks necessary for reconstruction to the contracted weeks, nor claim damages for delay in completion of the contract in respect of those added weeks. Counsel then went on :

In conclusion, Mr. Arbitrator, I would ask you to extend to my client the same sympathetic consideration which my friend has so justly claimed for **his** client. You have **seen** my client, Mr. John Robert Swillerton, you have **heard** him giving evidence from that chair, **and, sir,** you have formed a certain opinion of the character of my client and of his capacities and attainments as a builder. **Sir,** I feel that I shall not be trespassing beyond what is due from me when I say that the case of this honest, industrious, capable and conscientious man—who is **also,** sir, a poor man—struck down through no fault of his own by a rich and powerful one, is a **hard case.** He is a man of independence and character who has **made** his own way, and who has **paid** his own way; who has never before been involved in legal proceedings, who holds the respect of all who know him or do business with him, and the affection of those he employs, some of whom worked for his father forty years ago and by whom he is still known as "Young Jack." My client, sir, seeks no favours from any man, and is willing to abide by whatever your award, in law and in justice, may bring; but we have in this England, Mr. Arbitrator—and I thank God I can say it—a justice which is tempered with mercy and which gives the poor and the oppressed the full measure of consideration which the advantages of wealth and high station can command for the rich and influential.

While the arbitrator made a final note, Pitfall, who had been sitting, with his arms folded, gazing at the table, slowly turned his head and met Twistle's eye with blank face and a succession of almost imperceptible nods. Twistle acknowledged this tribute of his senior by complacently stroking the back of his head—of his own, not Pitfall's.

Directly the arbitrator had finished his note-making, Mr. Chawlegger handed him a sealed envelope. The Arbitrator opened it and, after reading, passed the brief letter it contained to Mr. Pitfall, who glanced through it and returned it with a consenting nod. The Arbitrator thereupon gave a whispered direction to his clerk, who left the room and a moment later ushered in the chastened Jago, whom he tactfully arrested at the foot of the table. The delinquent Colonel, squaring his shoulders and facing the arbitrator, as he might the President at a Court Martial, then miserably said :

I desire to apologize to you, Mr. Arbitrator, and to Mr. Pitfall, for having lost my self-control; and to withdraw the—er—hasty expressions which I—er—that—er—escaped me, and to beg that Mr. Pitfall will excuse my lapse and be so generous as to forget that the words—er—expressions, ever—er—er—escaped me.

Pitfall stood up, bowed to the arbitrator and to the plaintiff, and sat down.

The Arbitrator : That is a very proper statement, Colonel Jago. You may resume your seat. Mr. Chawlegger, I will hear you, if you please.

(NEXT WEEK—VII : MR. CHAWLEGGER'S CLOSING ADDRESS)

Institute of Arbitrators at Dinner

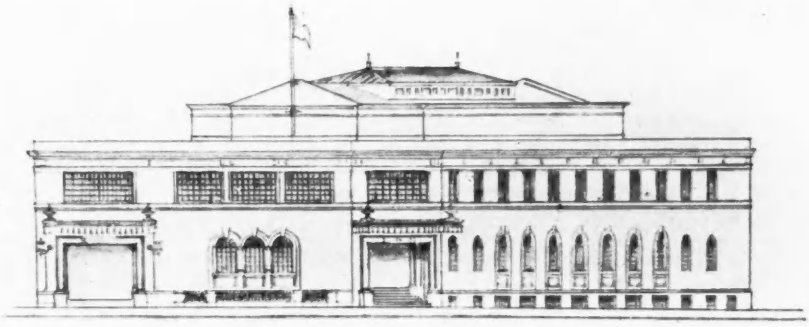
"IT is inevitable as business expands and increases that disputes of various kinds, disputes which are not in themselves, necessarily, matters for law should arise," said Mr. H. B. Chaplin Baldwin, M.A., in proposing the toast of the Lord Mayor and the Sheriffs and Corporation of the City of London, at the annual dinner of the Institute of Arbitrators. Further, he said, it is quite possible for the parties to agree to submit the case for arbitration and to require the services of some entirely independent person to arrive at a decision which above all must be equitable, for which a trained arbitrator is necessary. There were many cases where arbitration was better than litigation.

The Lord Mayor remarked, during the course of his reply, that he did not know how far the lawyers looked with favour upon the Institute of Arbitrators; probably they were broadminded enough to look upon it favourably. Certainly, he added, all commercial men did.

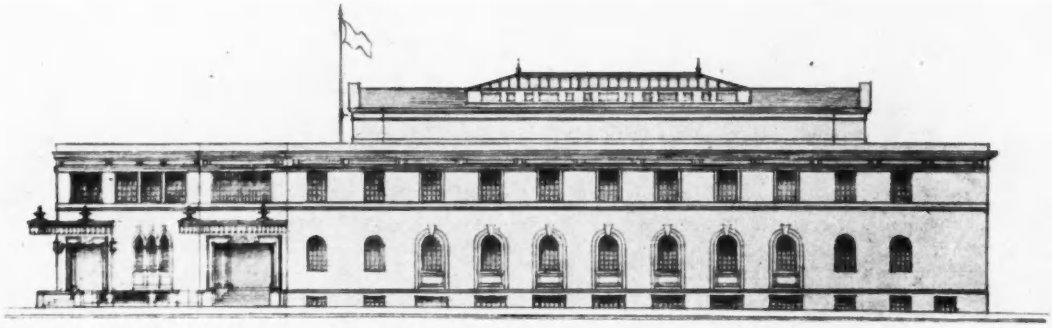
Sir James Martin, in proposing the toast of the Institute, said that as to the qualifications of an arbitrator it would appear that these were difficult to state. He had looked up "Russell" to see what he gave. He certainly gave disqualifications, and they were as follows : Madness, idiotcy, deafness, dumbness and blindness ! He thought that they must go a little deeper than that, and said he would take the qualifications of an arbitrator. An arbitrator must have a judicial mind and a habit of coming to definite conclusions, which must be free of fear or favour, affection or ill-will towards the parties before him. He must have a special knowledge of a business or professional nature, enabling him to understand the difficulty between the parties. He should also have a knowledge of the law of arbitration, and be able to conduct the business in reference.

That arbitration was probably the oldest form of settling disputes and differences was pointed out by Mr. Edgar S. Underwood, President, who said that it was mentioned about 300 B.C. by Plato, and even in those days the person was called arbiter Also, we had Solomon deciding the case of the two women claiming the child. This was really arbitration and a fifty-fifty award. Today we had institutions like the "Hague." If disputes arose in the trades a quick settlement could be obtained while the work continued.

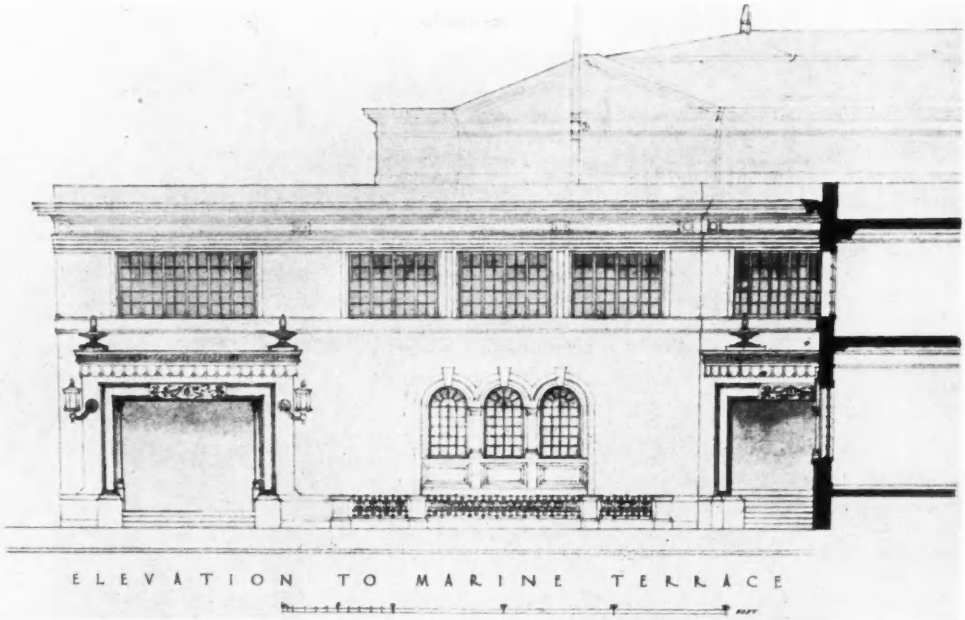
PAVILION COMPETITION: ABERYSTWYTH, N. WALES



ELEVATION TO MARINE TERRACE



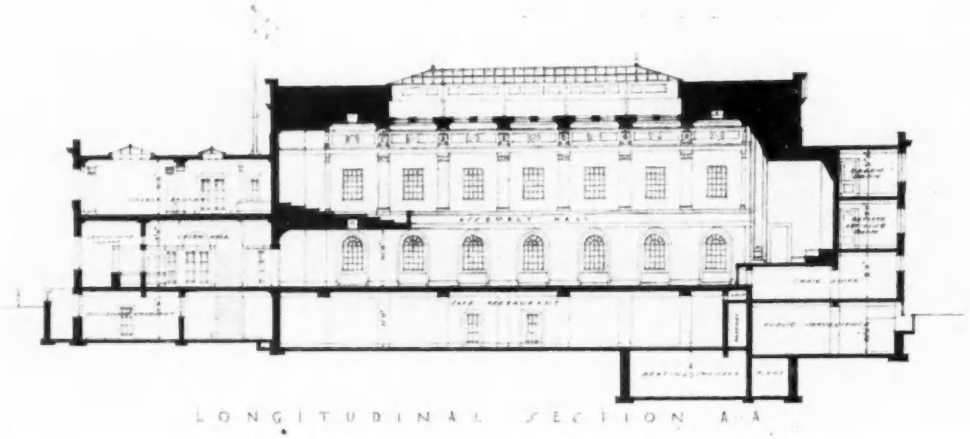
ELEVATION TO TERRACE ROAD



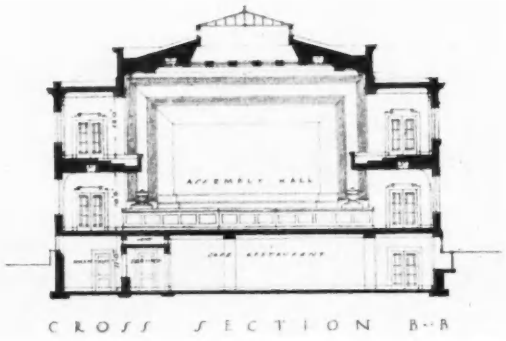
ELEVATION TO MARINE TERRACE

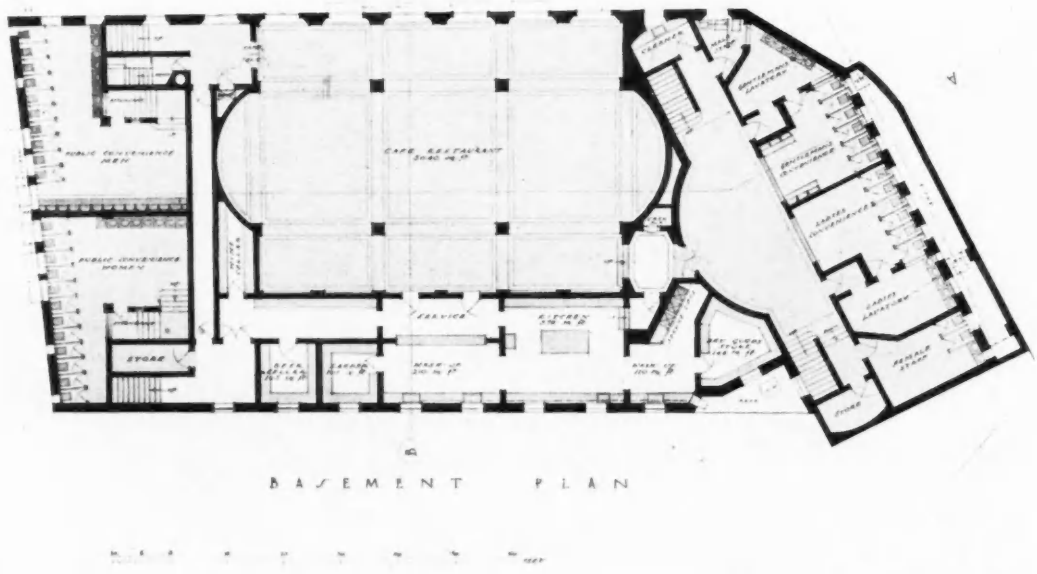
Awards in the Aberystwyth Corporation's competition for a municipal pavilion are: First (£100): Stewart McLaughlan and S. B. Howard, of Liverpool; second (£70): Charles F. Ellis, Aberdovey, and T. Wynne Thomas, Moseley; third: J. Crowe and Stockford Careless, London. Above are reproduced the winning competitors' drawings of two main elevations, and a detail of one of them; for other aspects of this design see the following two pages.

D



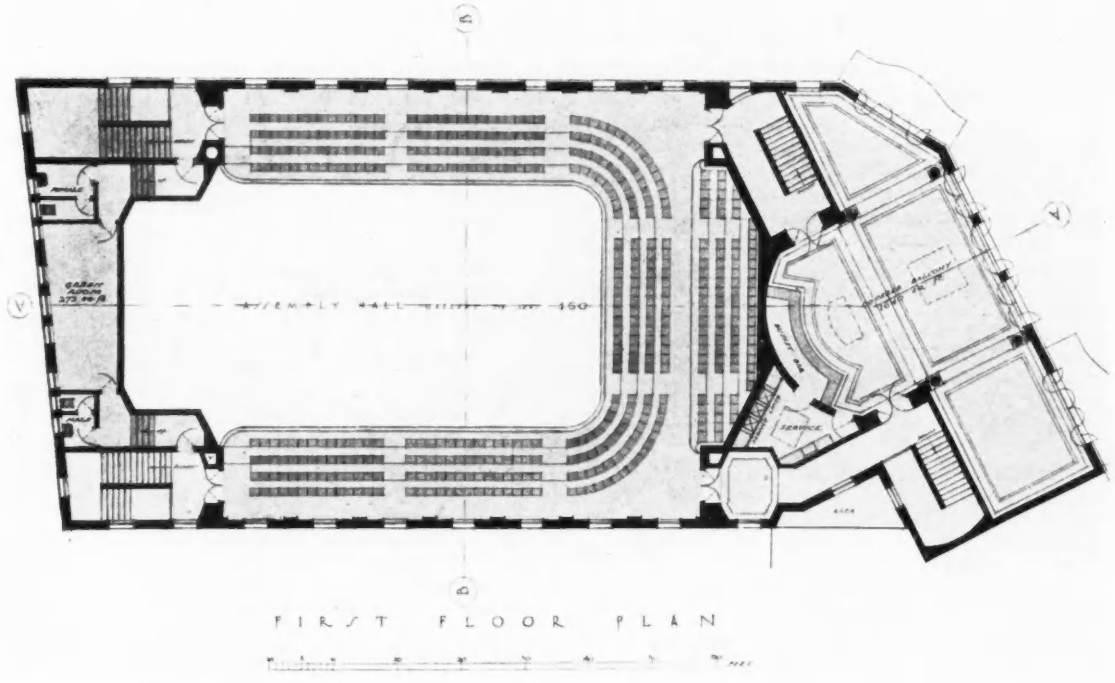


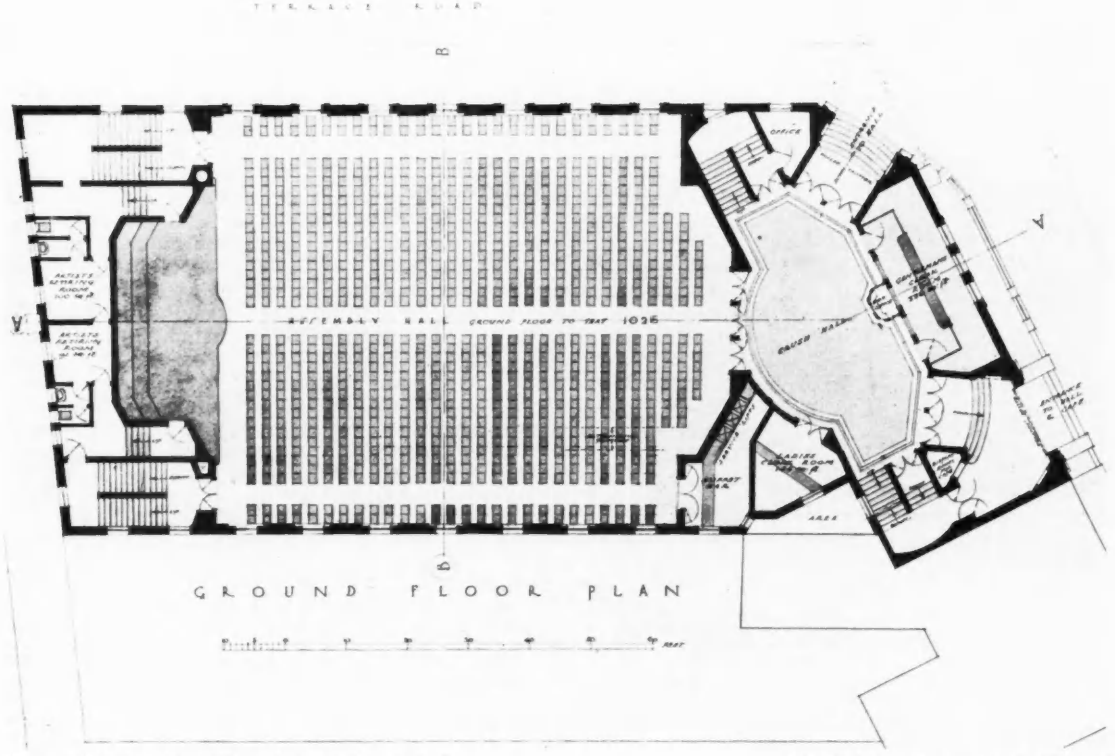




Aberystwyth Pavilion Competition: The Winning Design.] [*By S. McLaughlan and S. B. Howard.*

Of the two sectional drawings given above, the cross-section is here placed for the sake of comparison side by side with the external end-elevation of a similar aspect of the building; below is the basement plan, ground and first-floor plans being reproduced on the facing page. The site for this proposed pavilion is that previously occupied by the Waterloo Hotel, Marine Terrace, which was completely destroyed by fire some years ago.





Aberystwyth Pavilion Competition: The Winning Design.] *[By S. McLaughlan and S. B. Howard.]*

Drawings of the ground-floor and first-floor plans. The ground-floor plan shows the roads and portions of existing buildings bounding the site. Marine Terrace is on the right. While the scheme was required to cost not more than a maximum of £30,000, the estimate calculated from the designs here illustrated is £25,000. It is expected that they will be adopted for erection. There were over one hundred entrants for the competition.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

MAJOR NATHAN asked the Minister of Transport whether, in connection with the Government's unemployment schemes, work had yet been started on Waterloo Bridge; and when he expected work to start on Charing Cross Bridge.

Mr. Morrison said that the answer to the first part of the question was that work had not yet begun and, as regarded the second part, he must await progress of the necessary Bill, which was now before the House.

Sir Kingsley Wood asked the Minister of Health if he could state the total amount paid by Exchequer subsidy towards the cost of slum clearance since May last.

Mr. Greenwood said that the amount of Exchequer subsidy paid by his department in connection with slum clearance schemes since June 1 last to the present date was £54,345.

Viscountess Astor asked the Minister of Health if he would state the number of houses completed under all Housing Acts during the last quarters of 1928 and 1929, respectively.

Mr. Greenwood said the following statement gave the desired particulars :

Quarter ended	Number of State-assisted Houses completed during the quarter in England and Wales under the		
	Housing, Town Planning, etc., Act, 1919.	Housing etc., Act, 1923.	Housing (Financial Provisions) Act, 1924.
Dec. 31, 1928 ..	—	14,197	12,661
Dec. 31, 1929 ..	14	—	14,507

In reply to Mr. McKinley, Mr. Greenwood said the following table showed the average cost per superficial foot of non-parlour and parlour houses included in contracts let by or in direct labour schemes of local authorities in England and Wales during each of various years in question:

Year.	Non-Parlour Houses.	Parlour Houses.
	s. d.	s. d.
1923	9 3	8 9¼
1924	10 4¼	10 4
1925	10 11¼	10 9
1926	10 11½	10 10½
1927	10 8	10 6
1928	9 5¾	9 5½

Mr. Greenwood gave the following statement, in reply to Mr. Raynes, showing the average cost of non-parlour and parlour houses included in contracts let by and in approved direct labour schemes of Local Authorities in England and Wales during each of the three years ended December 31, 1929 :

Year ended Dec. 31.	Non-Parlour Houses.		Parlour Houses.	
	By Contract.	By Direct Labour.	By Contract.	By Direct Labour.
	£	£	£	£
1927	412	443	482	482
1928	359	388	427	456
1929	344	356	405	435

Lord Fermoy asked the Minister of Health if he would state the number of applications he had received, both in respect of urban and rural housing, since the increase of the housing subsidy; and how this total compared with the applications received for each of the six preceding periods.

Mr. Greenwood said the level of the housing subsidy had not been increased since August, 1924. He was not clear, therefore, for what periods the figures mentioned in the latter part of the question were desired. The number of houses authorized in England and Wales, under the Acts of 1923 and 1924 during the half-year ended December 31 last and the six preceding half-years were shown in the following table :

Half-year ended	Number of Houses authorized during the half-year under the		Number of Houses (included in preceding columns) authorized for rural districts.	
	Housing, etc., Act, 1923.	Housing (Financial Provisions) Act, 1924.	Housing, etc., Act, 1923.	Housing (Financial Provisions) Act, 1924.
December 31, 1926	40,825	34,707	11,215	4,523
June 30, 1927	38,599	34,111	11,780	4,568
December 31, 1927	24,413	26,273	6,394	2,299
June 30, 1928	21,806	18,931	4,764	1,805
December 31, 1928	25,368	26,068	5,868	3,000
June 30, 1929	26,514	29,774	4,805	4,019
December 31, 1929	2,699*	28,097	451*	3,248

* Authorized during the three months ended September 30, 1929.

Viscountess Astor asked the Minister of Health if he would state what was the estimate showing the number of houses built by 100 men in a year, published by the Building Research Board in April, 1922; and what was their estimate for the output of the building trade operatives in 1929.

Mr. Greenwood said the results contained in the Report referred to were based on an estimate that 1.45 men were required to build one house per annum, or 100 men per 69 houses. This estimate was derived from a special investigation of certain schemes. No comparable data relating to recent schemes were available.

Viscountess Astor asked the Minister of Labour if she would state the number of registered bricklayers, masons, plasterers, plumbers, and slaters employed and unemployed for the last quarters of the years 1928 and 1929 respectively.

Miss Bondfield said that statistics of the numbers actually in employment in the periods specified were not available, but the following table gave the estimated numbers of insured persons in the occupations in question, classified as belonging to the building industry in Great Britain at July of 1928 and 1929 and the numbers of such persons recorded as unemployed in the last quarter of each of those years :

BUILDING INDUSTRY—GREAT BRITAIN.

Occupation.	1928.				1929.			
	Estimated Nos. insured in July.	Numbers recorded as unemployed.			Estimated Nos. insured in July.	Numbers recorded as unemployed.		
		Oct. 22.	Nov. 26.	Dec. 17.		Oct. 21.	Nov. 25.	Dec. 16.
Bricklayers ..	72,810	5,809	6,380	6,656	74,630	7,250	9,155	9,089
Masons ..	21,640	1,944	2,138	2,304	21,960	1,468	2,351	2,466
Plasterers ..	22,880	2,355	2,672	2,941	23,840	2,592	4,139	4,700
Plumbers ..	32,070	2,563	3,020	2,620	32,910	2,504	2,705	2,878
Slaters	5,860	588	515	470	6,220	718	799	665

Sir Philip Richardson asked the Minister of Transport whether his attention had been drawn to the excessive vibration caused by heavy motor vehicles and the serious damage occasioned to properties adjoining roads; and, if so, what steps he proposed to take to minimize this damage and consequent loss to householders.

Mr. Morrison said that complaints had been made to him from time to time on this subject. There was reason to hope that the vibration caused by heavy traffic would diminish owing to the improvements which were continuously being made both in road surfaces and in the design and construction of heavy vehicles. Encouragement was given to the equipment of the heavier types of vehicles with pneumatic tyres by a substantial rebate in taxation.

Major Graham Pole asked the First Commissioner of Works whether it was his intention to accept an offer to defray the cost of erecting a permanent carillon of bells in Hyde Park.

Mr. Lansbury said he had this matter under consideration at present, but the question of an appropriate site in Hyde Park was one that was not free from difficulties. He was therefore carefully considering the question before making a decision.

Mr. Lovat-Fraser asked the First Commissioner of Works if he was aware that the fabric of a house in Chedworth, in the Cotswolds, was about to be removed to the United States of America; and if he would consider the desirability of introducing legislation to stop this process.

Mr. Lansbury said he was advised that this was not a suitable case for intervention under the Ancient Monuments Act, which does, in fact, give the Commissioners of Works power to protect buildings not in actual occupation as dwelling-houses. He did not consider that further legislation on this point was needed at present.

Mr. Lansbury informed Sir W. Davison that the total number of buildings which were in course of erection by the Office of Works during the year 1929 was 245. The total estimated cost of these buildings was approximately £6,700,000.

SOCIETIES AND INSTITUTIONS

WEST YORKSHIRE SOCIETY OF ARCHITECTS

A students' evening was held on Thursday last at the Leeds headquarters of the above society, with the following subject for debate: "That the Architectural Beauties of England be Preserved."

Mr. E. J. Sterry, opening in the affirmative, said that it was as much a question of preserving beauty in the new work which was going on, as in conserving the charm of the older buildings. Much of the prevailing vandalism was due to the present easy means of transport, new landowners, and a lack of settled schemes of rural planning. The only way to combat disfigurement was by education and co-operation.

In taking the negative side, Mr. G. B. Stickney remarked that the architect and student thought that because they liked certain buildings, they should be preserved, which seemed selfish reasoning. They found that the average person did not agree with their idea of beauty, and was not ravished at the sight of Doric columns. Did we wish to preserve dead architecture in the way that the Egyptians mummified their relatives? Architects should strive to create the new rather than trouble to preserve the old.

Mr. G. H. Foggitt, president, said that ideas of beauty changed, but he thought that a sense of the beautiful was more inherent in those who had been brought up in like surroundings. These had an enormous start over others less fortunate.

Mr. Norman Culley remarked that they were trying to turn Epstein's "Night" into "Morning" by means of flood-lighting. A sense of the beautiful lay dormant in every one, and it was part of an architect's duty to evoke and sustain that faculty.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE ASSOCIATION OF ARCHITECTS

A dinner arranged by the Northamptonshire Committee of the above society was held at Northampton. About fifty members and friends were present. The President, Mr. R. J. Williams, F.R.I.B.A., occupied the chair.

Mr. C. Malone, M.P., in proposing "The Royal Institute of British Architects," referred to the antiquity of the profession of the architect, and then went on to say that they were badly in need of good architects at Westminster. The Parliament buildings were crumbling away; some attributed it to the atmosphere outside, but others suggested it was the hot air inside. Whatever the cause might be, something like two or three million pounds would have to be spent upon the restoration of the buildings. He would like to see them rebuilt on more modern and business-like lines.

Mr. Ian MacAlister, M.A., in reply, said that for some time the idea had been growing that their profession should have statutory regulation and organization. He hoped that if they had anything like luck in the ballot at the House of Commons, their Bill would soon become law. The speaker went on to say that they had been suddenly threatened with a quarrel in London with the Institute of Builders, who were opposing the Architects' Registration Bill on certain theoretical grounds, and also because they complained of the failure to settle the "Form of Contract" problem. He felt convinced that the question would not be settled by a public quarrel, which would be a waste of time and energy, but by businesslike men negotiating round a table.

PRIZE-GIVING AT CARDIFF

The South Wales Institute of Architects, Central (Cardiff) Branch, and the Welsh School of Architecture, Technical College, Cardiff, held their prize distribution on February 6 at the college. The chair was taken by Mr. T. Alwyn Lloyd, F.R.I.B.A., President of the South Wales Institute of Architects. An address on the work of the school was given by Mr. W. S. Purchon, M.A., A.R.I.B.A., Head of the School. The prizes were presented by the Lord Mayor of Cardiff, Alderman William Charles, J.P.

During the session 1928–29 the following successes were gained by students in the School of Architecture, in addition to the prizes, diplomas and certificates presented that evening:

Rome Scholarship in Architecture (value £250 per annum for three years): James B. Wride.

R.I.B.A. Prize Competitions: Archibald Dawnay Scholarship (value £50 per annum for two years): John P. Ward.

Soane Medallion for Design, Finalist: Cyril J. Bartlett.

The Dovey Scholarship (value £75): Cyril J. Bartlett.

The following students, having obtained the Diploma of the School, subsequently passed the Professional Practice Examination of the R.I.B.A. qualifying for Associateship: Cyril J. Bartlett; Arthur E. Jewell.

The following student has passed the Intermediate Examination of the R.I.B.A.: Lister P. Rees.

The following prizes were presented during the evening:

Welsh School of Architecture Prizes

The Lord Mayor's prize for third-year students (£2 2s.), presented by Mr. W. R. Williams: William H. Maton.

President's prize for first-year students (£3 3s.), presented by Mr. T. Alwyn Lloyd, F.R.I.B.A.: Herbt. J. W. Lewis.

Second prize (for first-year work), presented by the Head of the School, Frederic G. Allen.

The Working Drawings prize (£2 2s.), presented by Mr. Ivor Jones, A.R.I.B.A. : Percy G. Budgen.

The prize for fifth-year Theses (£2 2s.), presented by Mr. T. Alwyn Lloyd, F.R.I.B.A. : Equal, Olwen M. E. Price and Cyril J. Bartlett.

The Architectural Sketching prizes (£1 11s. 6d. and 10s. 6d.), presented by Mr. H. Teather, F.R.I.B.A. : 1st, Norman D. Ayres; 2nd, Wm. J. Davies.

The Essay prize (£2 2s.), presented by the Architectural Press, Ltd. : Leonard F. Richards.

The Architectural Construction prize (£2 2s.), presented by Mr. H. Budgen, F.R.I.B.A. : Clifford Rosser.

The Batsford prize for Architectural History and Theory of Design (£2 2s.), presented by Messrs. B. T. Batsford, Ltd. : Hubert J. Hughes.

The Sketch Design prize (£2 2s.), presented by Mr. E. C. M. Willmott, A.R.I.B.A. : Equal, Cyril J. Bartlett and Olwen M. E. Price.

Certificate in Architecture (carrying with it exemption from the R.I.B.A. Intermediate Examination) : John T. Banks, Ronald Barraud, Hubert J. Hughes, William H. Maton, Ivor F. B. Richards, Clifford Rosser, John P. Ward.

Diploma in Architecture (carrying) with it exemption from the R.I.B.A. Final Examination, with the exception of the subject of Professional Practice : Cyril J. Bartlett (with distinction), Percy G. Budgen, Arthur E. Jewell.

The South Wales Institute of Architects, Central (Cardiff) Branch Prizes.

Design, second year (£2 2s.) : Norman D. Ayres.

Design, third year (£3 3s.) : Clifford Rosser.

Design, fourth year (£4 4s.) : Carl A. E. Thatcher.

Design, fifth year (£5 5s.) : Cyril J. Bartlett.

Measured Drawings (£5 5s.) : John T. Darch.

R.I.B.A. NEW MEMBERS

At the last general meeting of the R.I.B.A., the following members were elected :

As Hon. Fellow.

Llewellyn, Sir William, K.C.V.O., P.R.A.

As Hon. Associate.

Blount, Colonel Edward Augustine, C.B.E., F.S.I.

As Fellows (10).

Archer, H. D.	Adamson, J. R.
Burnett, P. V.	Bird, H. R.
Eprile, C. J.	Ogden, C. C.
Fitzgerald, G. E.	Scott, W.
Haseldine, C. F. W.	Lake, G. F.

As Associates (7).

Bayne, O. A.	Highet, G. I. C.
Chaplin, S. G.	Hirst, W.
Heath, C. P.	Peskett, H. M.

Whittingham, A. B., M.A.(CANTAB.)

THE THERMAE OF ROME

Sir Banister Fletcher, P.R.I.B.A., lecturing at the Central School of Arts and Crafts, described the construction and equipment of the great Roman Thermae. These gigantic thermal establishments, he said, showed those old Romans as past masters in matters of water supply, central heating and complicated planning. They were designed to minister to the pleasure needs of a population that emperors sought to placate, and these magnificent buildings, set in their park-like enclosure, were the last word in luxurious living.

Buildings designed to meet such varied requirements, the lecturer explained, involved a fresh development in architectural planning, and they could only be carried out by using slaves for labour and concrete for material.

SCOTTISH CASTLES

Although there were no actual Norman castles in Scotland, they undoubtedly formed the model for such as were built in the reigns of Alexander I and David I, and recalled the larger castles of France and England, such as the Chateau Gaillard Loches, Conway and Carnarvon, said Mrs. E. M. B. Hughes in a lecture on "Scottish Castles," delivered before the West Yorkshire Society of Architects.

As an example of a castle of that period, Bothwell, Lanarkshire, was not only one of the finest (said the lecturer), but one of the most extensive in existence. In Stirling Castle there were very distinct traces of a connection with France, and particularly in the influence of Italian workmen from Fontainebleau.



The above sketch has been drawn by a reader, and is his conception of some of the principal characters in the Jago v. Swillerton and Toomer arbitration case.

CORRESPONDENCE

AN APPRECIATION OF KARSHISH

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I should like to say how very much I enjoy Karshish's contributions to your excellent paper. Besides being amazingly amusing, because all the characters are so very human and come to life in an extraordinary way, they are very instructive, especially to a probationer, like myself, at the very beginning of the profession.

The latest addition in the case, *Jago v. Swillerton and Toomer*, Mr. Randegger, was a perfect joy, and his verbal duel with Mr. Chawlegger a thing to be read and enjoyed over again and again. I could not resist the temptation to sketch roughly some of the characters, as they appear to me, and humbly submit my ideas to you.

ALASTAIR GRARER

A NORMAN SHAW BUILDING

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I am sure that all will agree with Mr. Nathaniel Lloyd in his appreciation of the work and influence of Norman Shaw, but in the course of the development of his art I believe Shaw must have looked back with regret on such a building as that in Farnham; and I believe if he were alive today he would not wish his memory to be perpetuated by a building of this kind, which has nothing to recommend it but the name of its designer.

I think, therefore, the directors of Lloyds Bank will do no harm to the memory of Norman Shaw if they pull it down. In that case we may hope to see it replaced by a building which modestly takes its place by the side of its Georgian neighbours without putting them to the blush by any display of classic grandeur. In this connection I may refer to that excellent measured drawing of a street in Hatfield illustrated in THE ARCHITECTS' JOURNAL for January 29 last.

This seemed to me the perfect model for street architecture. Each house in it maintains its individuality and yet preserves a friendly and harmonious relationship with its neighbours, and to my mind this quality of relative harmony is much more important than any outstanding intrinsic qualities of the individual building.

M. H. BAILLIE SCOTT

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full published specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, London, W.C.2. The price is 1s. each.

LATEST PATENT APPLICATIONS

2,042. Lyne, R. J. Determining position and dimensions of buildings. January 21.

2,021. Parsons, J. Slabs for floors, pavements, etc. January 21.

SPECIFICATIONS PUBLISHED

324,087. Bates, H. K. Reinforced concrete floors for buildings and the like.

324,174. Gay, G. Means for securing roofing slates.

324,184. Tabanou, J. Building block.

THE ARCHITECTS' DIARY

WEDNESDAY, FEBRUARY 12

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Roman Architecture." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Ordinary Meeting. "Colour Determination in the Fashion Trades." By B. Holbrook Jackson. The Rt. Hon. Lord Ebury, D.S.O., M.C., will preside. **8 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, S.W.1. Informal Meeting. "The Influence of the Progress of Aeronautical Engineering on other Branches of Engineering Work." By L. A. Legross, O.B.E., M.INST.C.E. Sir John Thornycroft, K.B.E., will preside. **6 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to Messrs. Doulton's, Ltd., Porcelain Insulator Factory, Lambeth. **2.30 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Annual General Meeting at the Holborn Restaurant (Caledonian Room), W.C.1. "Half a Century of Boiler Making." By Sam Fox. **2.30 p.m.**

THURSDAY, FEBRUARY 13

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Print Making and Collecting." By W. M. Keesey, M.C., A.R.I.B.A., A.R.C.A., A.R.E. **7 p.m.**

SHEFFIELD UNIVERSITY. Second of a course of three lectures on "The Acoustics of Buildings." By M. H. Evans. (Lantern Illustrations.) **6 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Welding." By Major James Caldwell, M.INST.C.E. **6.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. "The Jet Wave Reflector: the Experimental and Theoretical Basis of its Design." By Dr. J. Hartmann. (To be illustrated by a Cinematograph Film.) **6 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Early Italian Engravings." By Professor A. M. Hind, O.B.E., F.S.A. **5.30 p.m.**

FRIDAY, FEBRUARY 14

TOWN PLANNING INSTITUTE, General Meeting at the Caxton Hall, Caxton Street, Westminster, S.W.1. "The Systematic Treatment of Road Signs." By H. V. Lanchester, F.R.I.B.A.

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Discussion on "Bracing for Wind and Vibratory Forces" to be opened by W. Smith. **7 p.m.**

SATURDAY, FEBRUARY 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 12 Russell Square, W.C.1. Visit to the Home Office Industrial Museum, Horseferry Road, Westminster, S.W.1. Meet at entrance. **2.15 p.m.**

MONDAY, FEBRUARY 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "The Thames Valley Preservation Scheme." By Professor Patrick Abercrombie, M.A., F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture I.) **8 p.m.**

TUESDAY, FEBRUARY 18

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Second of a course of three lectures on Electrical Transmission by Overhead Lines. (2) "Electrical Characteristics of Lines, Resistance, Inductants, Capacitance, Effects of Atmospheric Conditions on Insulation." By Charles W. Marshall, B.SC., M.I.E.E. 5.30 p.m. Faculty of Arts. Fifth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. General Discussion on "Problems in Illuminating Engineering." Light refreshments at 6.30 p.m. **7 p.m.**

LONDON MASTER ASPHALTERS ASSOCIATION, 40 Broadway, S.W.1. Tenth Annual Dinner at the Restaurant Frascati, Oxford Street, W.1. 6.30 for 7 p.m. **6.30 p.m.**

WEDNESDAY, FEBRUARY 19

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. Cantor Lecture, "Alfred Stevens: Architect-Sculptor-Painter." **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Honan Night. "Modern Architecture of Sweden." By B. B. Lewis.

THURSDAY, FEBRUARY 20

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate: "That under the present system of Competitions in England, the progress of Architecture is being retarded." Affirmative, J. G. Sidebottom. Negative, T. F. Firth. **7 p.m.**

SHEFFIELD UNIVERSITY. Last of a course of three lectures on "The Acoustics of Buildings." By M. H Evans. (Lantern Illustrations.) **6 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "The Ancient Guilds and their Halls." By Allen B. Walker. (Lantern Illustrations.) **7.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Italian Furniture." By H. Clifford-Smith, F.S.A. **5.30 p.m.**

FRIDAY, FEBRUARY 21

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Royal Observatory, Greenwich." By Sir Frank Dyson, Astronomer Royal. **5 p.m.**

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE, Gower Street, W.C.1. "The Infirmary of the Mediæval Monastery, with special reference to the Abbey of Westminster." By Professor Percy Flemming, F.R.C.S. (Lantern Illustrations.) **5.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. "Paper Insulated Power Cables." By S. H. Hart. **6.15 p.m.**

SATURDAY, FEBRUARY 22

Sunrise, 6.0 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Fourth of a Series of Six Non-Technical Lectures on Present-Day Architecture. "Decoration and Furnishing." By G. G. Wornum, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Foyle's New Bookshop, 121 Charing Cross Road, W.C.2. **3 p.m.**

MONDAY, FEBRUARY 24

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Designing for the Film." By Lawrence Irving. 8 p.m. Exhibition of Film Settings (until March 22). **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture II.) **8 p.m.**

TUESDAY, FEBRUARY 25

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to the Bishopsgate Institute, Bishopsgate, E.C.2. **3 p.m.**

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Last of a course of three lectures on Electrical Transmission by Overhead Lines. (3) "Typical Transmission Lines in use in Great Britain: Characteristic Features of Low, Medium and High Voltage Construction." By Charles W. Marshall, B.S.C., M.I.E.E. 5.30 p.m. Faculty of Arts. Sixth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) 5.30 p.m. **5.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North-Eastern Centre. At the Hotel Metropole, King Street, Leeds. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." By L. C. Grant. **7 p.m.**

THURSDAY, FEBRUARY 27

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Social Life and Art in France during the Eighteenth Century." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Ferro-Concrete Cooling Towers." By T. J. Grueritte. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Timber Architecture in Old Houses and Churches." By Philip M. Johnson, F.S.A., F.R.I.B.A. (Lantern Illustrations.) **7.30 p.m.**

FRIDAY, FEBRUARY 28

R.I.B.A., 9 Conduit Street, W.1. London Architecture Medal, 1929. Latest date for submission of nominations.

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. Ordinary Meeting. At the Chamber of Commerce Buildings, New Street, Birmingham, "Types of Movable Bridges." By J. D. Vaughan M.SC., A.M.INST.C.E. **6.30 p.m.**

ACCRINGTON COMPETITION. Latest date for submission of designs for the New Police and Fire Stations.

SATURDAY, MARCH 1

Sunrise, 6.47 a.m. Sunset, 5.39 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, Manchester and District Branch. Visit to the Manchester Newspaper Works and Offices (Time will be announced later.)

MONDAY, MARCH 3

R.I.B.A., 9 Conduit Street, W.1. General Meeting, "The Design of Modern Railway Stations in Europe and America." By Frank Pick. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2 Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture III.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, South Midland Centre. At the University, Edmund Street, Birmingham. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. Also, "The Heat Pump—An Economical Method of Producing Low-Grade Heat from Electricity." By T. G. N. Haldane, M.A. **7 p.m.**

TUESDAY, MARCH 4

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Seventh of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

WEDNESDAY, MARCH 5

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper by L.A.P.A. **8 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Ordinary Meeting. "The Ford Factory, Dagenham." By Major E. H. Heathcote, M.A.(CANTAB.), F.R.I.B.A., A.M.INST.C.E., A.M.I.MECH.E. **7 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. Discussion on "The Space Required for Central Station Equipment." **7 p.m.**

THURSDAY, MARCH 6

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting: Nomination of Officers. "Classic Forms and English Geology." By Hope Bagenal, D.C.M., A.R.I.B.A. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Plywood: Its Influence on Modern Furniture Design." By Percy A. Wells. (Lantern Illustrations.) **7.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual Dinner at the Florence Restaurant, Rupert Street, W.1. 7.15 for 7.30 p.m. **7.15 p.m.**

SATURDAY, MARCH 8

Sunrise, 6.32 a.m. Sunset, 5.51 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Old and New Architecture." By the Hon. Humphrey Pakington, A.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

MONDAY, MARCH 10

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Some District Heating Systems." By L. J. Fowler, B.A. Light Refreshments at 6.30 p.m. **7 p.m.**

WEDNESDAY, MARCH 11

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Eighth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. **5.30 p.m.**

THURSDAY, MARCH 13

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate on "Is the Skyscraper Architecture?" Affirmative, D. B. Smith. Negative, G. L. Crowther. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Walnut and Mahogany Furniture from 1710 to 1750." By Herbert Cescinsky. **7.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Pyramid Building Problems: Manpower Organization in the Pyramid Age." By D. Davidson, F.R.S.A. **6.30 p.m.**

SATURDAY, MARCH 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

MONDAY, MARCH 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting. Presentation of the Royal Gold Medal. **8.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "High Tension Sub-station Control Gear." To be opened by A. F. Harmer. **7 p.m.**

TUESDAY, MARCH 18

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts, Last of a course of nine public lectures on "Italian Paintings." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY. Paper on "The Lighting of a Large Liner." Light Refreshments at 6.30 p.m. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North Eastern Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Voltage Control of Large Alternators." By H. W. Taylor. **7 p.m.**

WEDNESDAY, MARCH 19

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Design in Town Planning." By Dr. Raymond Unwin, F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Ordinary Meeting. "The Portrait in Later Monumental Sculpture." By K. B. ESDAILE (Mrs.). **8 p.m.**

THURSDAY, MARCH 20

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. Election of Officers. "Mainly About Germany." By Howard Robertson, F.R.I.B.A., S.A.D.G. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.C.2. "London in the Middle Ages." By D. Martin Roberts, M.A. (Lantern Illustrations.) **7.30 p.m.**

FRIDAY, MARCH 21

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Annual Meeting at the Royal Institute Galleries, Piccadilly, W.1.

SATURDAY, MARCH 22

Sunrise, 6 a.m Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Houses at Home and Abroad." By Oswald P. Milne, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Post Office (London) Railway, Mount Pleasant, N.W. **4 p.m.**

TRADE NOTES

The accompanying illustration shows the large extension which has just been made from the designs of Mr. T. Burditt to the factory of Messrs. Horlick's Malted Milk Co., Ltd., at Slough. The extension has a steel framework, and is built with Phorpres Cellular Flettons. Following is a résumé of a letter received by Messrs. London Brick Co. and Forders, Ltd., the manufacturers of the bricks, from Messrs. Horlick's Malted Milk Co., Ltd., the owners of the building. It is signed by Mr. O. P. Horlick, director. "We think you will be interested to learn of the considerations which prompted our use of your Phorpres Cellular Flettons in the imposing extension to our works at Slough. Our architect and contractors were of the opinion that your bricks would improve the insulation of sound, heat and moisture without decreasing the strength of the building. Our works, situated as they are within a 'disturbance' distance of the railway line, require, in the interests of our workers, that we should ensure an adequate insulation from noise; your bricks, our architect feels, are ideal in this respect, and they certainly give that dryness and evenness of temperature so essential to the production of our malted milk. Furthermore, we find their lightness makes them quicker and easier to handle. We are glad to intimate that in our opinion the decision was a wise one."

The enormous weight of big modern buildings has provoked a great deal of discussion. It is agreed that the traffic conditions of today—and of the future—demand buildings of exceptional strength, which possess a wide margin of safety. But in obtaining this necessary strength by sheer bulk, much of the strength—too much, it is felt—is absorbed in carrying the huge dead weight of the building, thus reducing the reserve strength to a minimum.

Since brickwork supplies the greatest proportion of dead weight in a building, it was logical to approach the problem from this direction. It was essential, however, that, in lessening weight, there should be no loss of strength. This formidable problem was tackled by the London Brick Co. and Forders, Ltd., and the new brick, a development of their Phorpres Flettons, produced. Phorpres Cellular Flettons are 23 per cent. lighter in weight (1,000 $2\frac{5}{8}$ normal Flettons = 2 tons 9 cwt.; 1,000 $2\frac{5}{8}$ Cellular Flettons = 1 ton $16\frac{1}{2}$ cwt.), yet they possess the structural strength of an ordinary Fletton brick. Crushing load of Cellular Flettons = 22·2 tons per ft. run. Modulus of elasticity (to 40 tons) = 0·59 × 10 lb. sq. in.

This means, speaking approximately, that a five-stories building built of Phorpres Cellular Flettons weighs no more than four stories built with ordinary bricks. In the case of buildings of the same size using steel-brick-stone construction, if the normal amount of steelwork is employed, less of its strength is absorbed in supporting these lighter weight bricks, and a much greater reserve of strength is left to withstand the vibration set up by modern traffic.

A further advantage of Cellular Flettons is the sealed multi-cellular construction which they give in practice. This means better insulation of heat, sound, and moisture—an important advantage both to the city building and the suburban villa. Heat transmission is reduced from ·000095 gram calories per sec. per sq. cm. per 1°C. to ·00008 = 16 per cent.; sound transmission to ½ as against solid bricks. Porosity and absorption effects have all been reduced owing to the decreased maxima.

Phorpres Cellular Flettons are R.I.B.A. standard in size and are handled as ordinary bricks. They are not to be confused with cavity bricks or tiles. Their cost is only a fraction more than ordinary Flettons—and this cost, it is claimed, is more than covered by the advantages and economies permitted. The bricks have been tested by the Building Research Station of the Department of Scientific and Industrial Research and the National Physical Laboratory. H. B.



Extension to factory for Messrs. Horlick's Malted Milk Co., Ltd., Slough. Designed by T. Burditt. It is built of Phorpres Cellular Flettons and steel.

On Friday last the Nettleson Players, comprising members of various branches of the staff of Messrs. Nettlefold and Sons, Limited, presented *Tilly of Bloomsbury*, a comedy in three acts, at the Kings Hall, Caroline Street, W.C. The whole cast of sixteen players performed exceptionally well, and although it is unfair to single out anyone for special praise, it should be mentioned that Miss Madge Breed, who played Tilly, was a brilliant success. This was the second play given by the same players in the Kings Hall during recent months.

THE BUILDINGS ILLUSTRATED

Mr. Walter Gilbert carried out the whole of the electrical fittings in the principal rooms of Royal London House, illustrated in our last issue, including the directors' and committee-rooms, boardroom, entrance vestibule, halls (main, lower and rear) and corridors on all floors. Among the sub-contractors for the building, other than those mentioned last week, were the following: Engineering Works (Electrical and General), Ltd., other electric fittings; Frederick Tibbenham, Ltd., furniture in directors' room; J. P. White and Son, Ltd., panelling; Roneo, Ltd., office furniture.

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Artillery House, Westminster, S.W. (pages 268, 271-274). General contractors, John Knox and Dyke, Ltd. Sub-contractors: Natural Rock Asphalte, Ltd., asphalt; London Brick Co. and Forders, Ltd., and Wiggins, Sankey & Co., Ltd., bricks; Stuart's Granolithic Co., Ltd., artificial stone; Leeds Fireclay Co., Ltd., faience and sanitary fittings; Redpath, Brown & Co., Ltd., structural steel; Pilkington Bros., Ltd., glass; Mellowes & Co., Ltd., patent glazing; Sulzer Bros., Ltd., central heating; G. E. Taylor & Co., Ltd., electric wiring, electric light fixtures and electric heating; Smeaton and Sons, Ltd., plumbing; Brookes, Ltd., stairtreads; Nettlefold and Sons, Ltd., door furniture; Crittall Manufacturing Co., Ltd., casements and window furniture; Express Lift Co., Ltd., lifts.

Library at the Polytechnic, W.1 (page 284). General contractors: Messrs. Bovis, Ltd. Sub-contractors: B. W. Blindell, oak joinery; F. De Jong & Co., fibrous plaster; Robinson Bros., Ltd., cork flooring; Mortimer and Gall, electric wiring; S. Mulliner, Ltd., heating; Howard Bros., electric light fittings.

Garage, Lewisham Hospital (page 299). General contractor: Albert Monk. Sub-contractors: The Trussed Concrete Steel Co., Ltd., reinforced concrete engineers, reinforced concrete; Tyler, Freeman and Minett, central heating; G. Taylor & Co., electric wiring; Haskins, revolving doors.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BARKING U.D.C. has given directions for the architect and medical officer of health to prepare a layout of the isolation hospital on a new site, and at the same time to report as to the erection of a maternity hospital and clinic, etc., on the existing hospital site.

Plans passed by the CAMBERWELL B.C.: Shops, Linden Grove, for Mr. H. W. Cash; garages, Kerfield Place, for Mr. G. Trotman; house, College Road, for Mr. F. A. Llewellyn; shops, Park Road and Croxted Road, for Mr. A. W. T. Richards.

The L.C.C. is to proceed with the erection of tenements at Comber estate, Camberwell, cost £162,000; Holland estate, Stepney, cost £44,000; Highes Field estate, Deptford, cost £243,000; Wapping estate, Stepney, cost £187,000; and Whitmore estate, Hoxton, cost £234,000.

The FINCHLEY Education Committee is to prepare plans for the proposed new school on the Summers Lane site.

Plans passed by the FINCHLEY U.D.C.: Eight houses, junction of Naylor Road and Hayward Road, for Messrs. A. J. Harris and Sons; additions, Kensit Memorial College, Hendon Lane, for Mr. J. A. Kensit; workshop and office, Arcadia Avenue, Limes estate, for Messrs. Compton Bros.; two shops, Great North Road, Whetstone, for Messrs. C. F. Day, Ltd.; two houses, Hill Top, for Mr. G. Ramsbotham; twelve houses, Ossulton Way, for Mr. H. Lawrance; two houses, Addington Drive, for Mr. V. C. Smith; four houses, South Crescent, for Messrs. Rainbird and Scarfe; additions to hospital, Bow Lane, for Finchley Memorial Hospital; new road and sewers, Hampstead Garden Suburb, for Co-Partnership Tenants, Ltd.; additions, Belgrave tavern, High Street, for Messrs. Hoare & Co.; four houses, Templars Crescent, for Mr. A. Ibbetson.

The ILFORD Corporation has approved plans of the proposed town hall extensions at a cost of £61,581.

The ILFORD Corporation is to acquire twelve acres of land in Fencepiece Road, and is to invite tenders for the erection of 146 houses in accordance with the plans prepared by the borough engineer, at an estimated cost of £65,000.

Plans passed by the ILFORD Corporation: Thirty-two houses, Staines Road, for Messrs. E. Glenny and Son; ten houses, Windermere Gardens, for Mr. T. Anders; three houses, Parkway, for Messrs. J. W. Moore and Sons, Ltd.; four houses, Campbell Avenue, for Vernon Gordon & Co.; seven houses, Campbell Avenue, for Mr. W. Wakeling; additions to store, 118–122 High Road, for Messrs. F. W. Woolworth & Co.; two houses, Victoria Road, for Mr. J. Hook; fifteen houses, Horns Road, for Mr. J. W. Lohden; additions, St. Paul's church, Barley lane, for Messrs. Goddard and Sons; twenty-four houses, South Park Road, for Mr. C. Fryatt; additions for B.I.M., Ltd., Roden Street, for Messrs. Hammond and Miles; warehouse for Cakebread, Robey, Ltd., High Road, for Mr. G. E. Holditch; shops and flats, Ley Street, for Mr. W. J. Lewis; rebuilding "Beehive" public-house, Beehive Lane, for Mr. F. M. Kirby; twelve houses, South Park Crescent, for Mr. J. Aldridge; 104 houses, Loxford Lane estate, for Mr. T. B. Goodwin; four houses, Perrymans Farm Road, and eight houses, Hamilton Avenue, for Mr. A. G. Scholes.

The Middlesex Education Committee is to purchase a site at Church Lane, KINGSBURY, for the erection of an elementary school.

The trustees of the Borough Market, SOUTHWARK, are to reconstruct the market at a cost of £150,000.

The L.C.C. Improvements Committee has prepared an amended scheme for the improvement of the traffic conditions at the Elephant and Castle, SOUTHWARK, at a cost of £1,913,000.

The SOUTHWARK B.C. has under consideration a reconstruction scheme for an area in the vicinity of Lock Square.

The WIMBLEDON Corporation has approved the scheme for the extension of the library building.

Plans passed by the WIMBLEDON Corporation: Alterations to covered stand, All-England Lawn Tennis Ground, Church Road, for the Trussed Concrete Steel Co., Ltd.; alterations, Raynes Park cinema, Pepys Road, for Mr. R. Atkinson; three houses, Home Park Road, for Mr. G. Hazell; underground electricity sub-station, The Downs, for Mr. A. E. McKenzie; two houses, Wool Road, for Mr. A. J. Styles; bungalow, Holland Gardens, Cambridge Road, for Mr. T. Webster; two houses, Somerset Road, for Messrs. G. E. Wallis and Sons, Ltd.; four shops, Coombe Lane, for Mr. E. G. W. Souster.

SOUTHERN COUNTIES

Plans passed by the EASTBOURNE Corporation: Alterations, Feedwell restaurant, Seaside Road, for Mr. W. R. Hamblyn (architect); alterations, 175, 186 Seaside, and house, Baldwin Road, for Mr. A. Ford (architect), on behalf of Messrs. Baker, Sons and Hyde; house, Prideaux Road, for Mr. J. Bowley (architect); two houses, Dilligburgh Road, for Mr. A. J. Fellows (architect); alterations, 102 South Street, for Messrs. P. D. Stonham and Son (architects); pavilion, Gildredge Park, for the Upperton Lawn Tennis Club; conveniences, Seaside Baths, for the borough engineer; four houses, Chamberlain Road, for Messrs. W. Llewellyn and Sons; two houses, Neville Avenue, Hampden Park, for Mr. F. C. Benz (architect); fourteen houses, Kingston Road, kiosk, Beachy Head Hotel, riding school, Trinity Place, for Messrs. P. D. Stonham and Son (architects); two houses, Chamberlain and Milton Roads, for Messrs. Weller and Seymour; additions, Royal Marine Laundry, Winchelsea Road, for Mr. C. M. Wood (architect); alterations, 89 Terminus Road, for Mr. A. Ford (architect), on behalf of the Eastbourne Gas Co.; alterations, Baskerville Press, York Road, and alterations, 85 and 87 South Street, for Messrs. P. D. Stonham and Son (architects); alterations and additions, 156 Terminus Road, for Messrs. Cripps and Co.; sub-station, Avenue House, for the Eastbourne Corporation; ten houses, St. Anthony's Avenue, for Messrs. Scales and Baker (architects).

SOUTH-WESTERN COUNTIES

H.M. Office of Works is negotiating with the CHELTENHAM Corporation for a site for the erection of a labour exchange.

Plans passed by the CHELTENHAM Corporation: New road, off Naunton Lane, for Naunton Estates, Ltd.; additions, Bayshill Lawn, Parabola Road and Sidney Lodge, Overton Road, for the Ladies' College Council; house, Prestbury Road, for Mr. J. Allen; house, Tewkesbury Road, for Mr. T. H. Fleetham; office, Painswick Road, near Shurdington, for Messrs. Miles and Son; totalisators, indicator and garage, for the Cheltenham Racecourse Co.; two houses, Pilford Avenue, for Messrs. Bendall and Sons; two houses, Old Bath Road, for Mr. P. Witts; rebuilding, 95 Winchcomb Street, for Messrs. Marks and Spencer.

MIDLAND COUNTIES

The BIRMINGHAM Corporation is acquiring property in connection with a comprehensive scheme for the extension of the wholesale fruit and vegetable market, at a total estimated cost of £259,000.

The BIRMINGHAM Corporation has prepared plans for the erection of new baths at Kent Street, at a cost of £75,000.

Schemes have been prepared by the BIRMINGHAM Corporation for relief works, including roads, sewers, bridges, sewerage and river improvements, at a total cost of £2,092,000.

The Ministry of Health has sanctioned a loan of £325,000 for the BIRMINGHAM Corporation, for the reconstruction of gasworks.

Plans passed by the DUDLEY Corporation: House, Church Road, Netherton, for Mr. A. L. Golding; extensions to Park Council Schools, Nelson Road, for the Education Committee; alterations and extensions, Kesson's Charity School, Eve Hill, for the trustees; four houses, Church Road, Netherton, for Mr. H. Smart; boiler house, Birmingham Road, for the Station Garage Co., Ltd.

The Notts Education Committee is to erect a school for 500 at HARWORTH.

The Notts Education Committee is to erect new premises for the County School of Art, MANSFIELD, at a cost of £8,500.

The NOTTS Education Committee is to purchase Sutton Fields House and estate of thirty-five acres of land, for the provision of accommodation for mentally defective girls.

The RETFORD Corporation has prepared a scheme for extensions to the pumping plant and the sewage works.

NORTHERN COUNTIES

The BIRKENHEAD Education Committee is to enlarge the Temple Road, Hemingford Street and Brassey Street central schools.

The BIRKENHEAD Corporation Parks Committee has received sanction to borrow £13,874, for improvement works in the parks, cemetery and recreation grounds.

The Catholic authorities are to erect a public elementary R.C. school in Challis Street, BIRKENHEAD, for the accommodation of 350 junior and infant scholars.

Plans passed by the BOLTON Corporation: Extensions, Hill Mill, Temple Road, for Mr. Henry Crossley; sub-station, Delph Hill, Chorley Old Road, for the Electricity Committee; addition to filter house, Ferns Park, for the Waterworks Committee; extension to clubhouse, off Junction Road, for Deane Golf Club, Ltd.; extensions to offices and workshop, Blackburn Road, for Mr. Robert Mayoh; garage and recreation room, off Morris Green Lane, for Mr. James Scott; extension to dyehouse, Sunnyside Mills, for Messrs. Tootill, Broadhurst, Lee & Co., Ltd.; two houses, Old Kiln Lane, for Mr. A. S. Wood; five houses, Hedley Street, and six houses, Walker Avenue and Rishton Lane, for Mr. Wilfred Andrew; extension to pavilion, off Green Lane, for Bolton Cricket Club; alterations, Albion Inn, Moor Lane, for Leach's Brewery, Ltd.; extension to workshop, Arden Street, for Mr. James Kirkman; six houses, Walker Avenue, for Mr. Thomas Blakley; six houses, Kingwood Avenue, for Mr. A. S. Woods; extension to premises, Derby Street, for Bolton Savings Bank.

The Manchester Corporation is to erect a public washhouse at Herbert Street, CHEETHAM, at a cost of £12,640.

The CHESHIRE C.C. is promoting a Bill for the constitution of a Joint Sewerage Board, for undertaking sewerage works, at a cost of £868,850.

The CHESHIRE Joint Board for the Mentally Defective is to adapt Cranage Hall as a temporary institution for the reception of fifty-six defectives, at an estimated cost of £9,000.



Garage at Lewisham Hospital, S.E. Designed by Mathews, Son and Ridley. The building is of reinforced concrete. Central heating is installed.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B_1	BANBURY ..	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A_1	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_1	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_2	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor ..	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_3	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_3	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 1½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B_1	Chatham ..	S. Counties	1 4½	1 0½
B_1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_3	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham ..	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 4	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_3	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	1 1½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle ..	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2¾*
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 7	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland ..	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_3	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_2	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour ;* NAVVY, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day :

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
If left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* BRICKLAYER, 1s. 8½d. *per hour ;* PLUMBER, 1s. 8½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour ;* DO. *fixer,* 1s. 9½d. *per hour ;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone :			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator." etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour ;* TILER, 1s. 8½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200 :			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal :

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms		6 7 0
Grey-green do.		5 9 0
Green peggies, 12 in. to 8 in. long		4 13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	£3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour ;* JOINER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds) :			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1½ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1⅛ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1⅛ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1⅛ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1⅛ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1⅛ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1⅛ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1⅛ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅜ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4⅛
DO. *26 oz.*	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup., per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. *⅜ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	4

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	0
Linseed oil, raw, per gall.	0	4	0
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards. plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	5
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—



GENERAL SECRETARY'S OFFICE:
NATIONAL DEPOSIT FRIENDLY SOCIETY'S HEADQUARTERS,
QUEEN SQUARE, BLOOMSBURY, W.C.
By
W. H. ANSELL

THIS room is on the first floor, at the corner of the building where Queen Square is intersected by Ormond Street, and one of the windows, of which an indication is seen on the extreme right, overlooks the Square. Adjacent, along this same front, is the large committee room, and to it the door, seen on the left of this photograph, gives access.

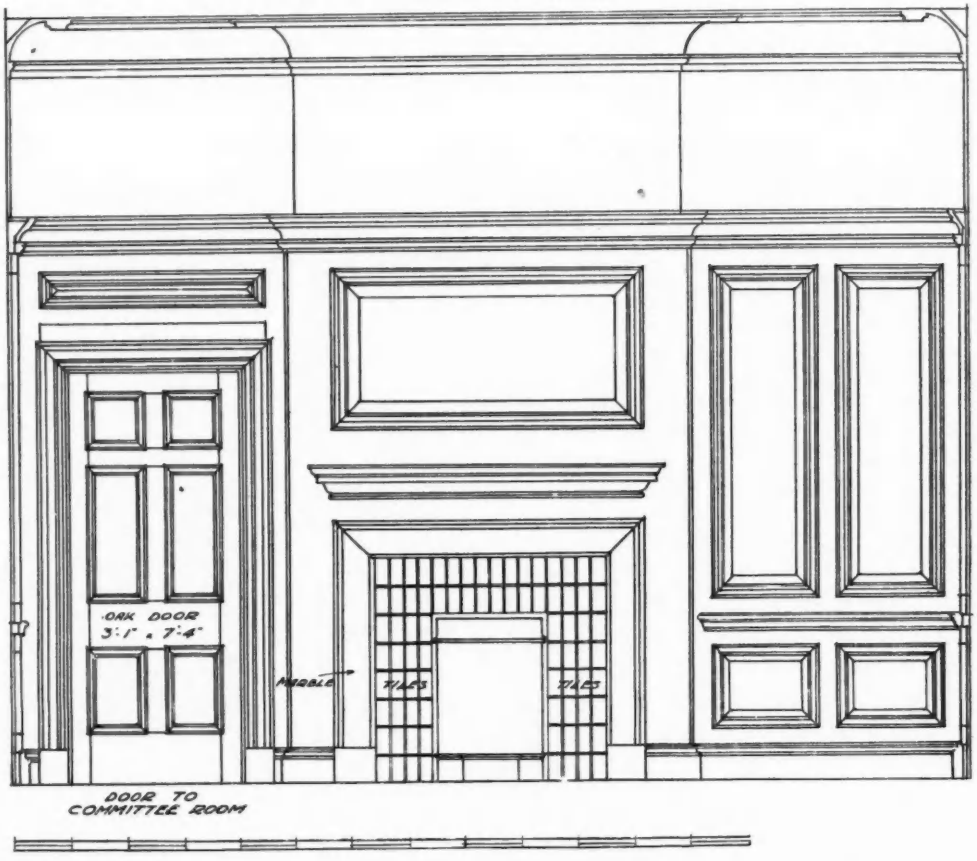
In common with the committee room and other private rooms, this office has oak panelling, a section of which, with radiator grille, below the window, is moveable, as will be clear from the lower of the two workings drawings reproduced on the following page. The fireplace surround and hearth are in tiles. The floor is of wood blocks.

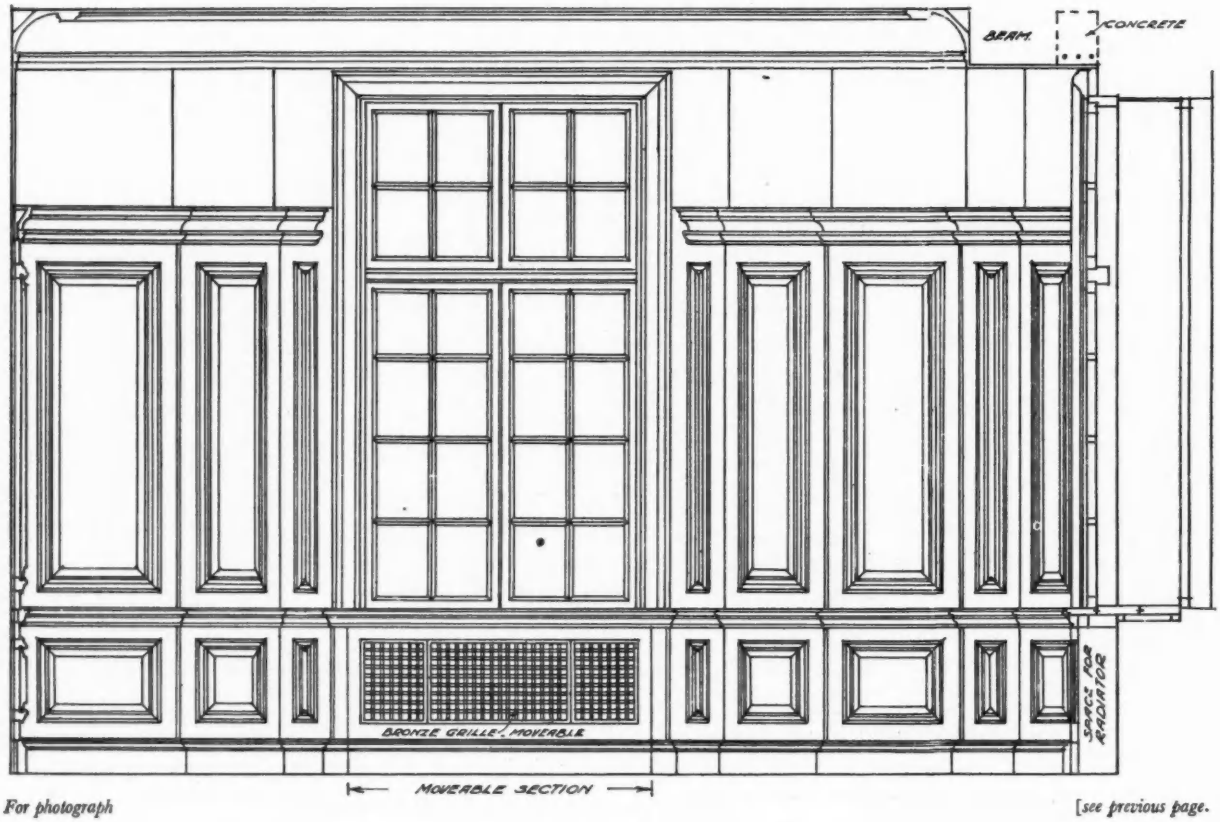
A photograph and working drawings of the entrance hall of this building appeared in the issue of THE ARCHITECTS' JOURNAL *for January 22, 1930.*

NATIONAL DEPOSIT FRIENDLY SOCIETY'S OFFICES, BLOOMSBURY

Elevations of Oak Panelling around Fireplace and Window in General Secretary's Office

By W. H. Ansell

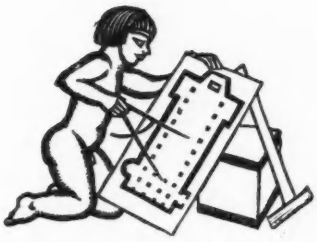




For photograph

[see previous page.

THE ARCHITECTS' JOURNAL



WEDNESDAY, FEBRUARY 19, 1930

LET ARCHITECTS AND BUILDERS AGREE

"By harmony our souls are sway'd;
By harmony the world was made."

GRANVILLE.—*The British Enchantress*
(Chorus) Act I., Sc. I.

IF there are two classes of people in the whole world who cannot afford to quarrel, manifestly they are architects and builders. One of the basic industries of the country depends for its welfare very largely upon the establishment of harmony and mutual respect between the two principal partners who control and direct its operations. It is natural, of course, that, from time to time, differences of opinion may arise between architects and builders, but surely these should be the occasion for diplomacy and mutual accommodation.

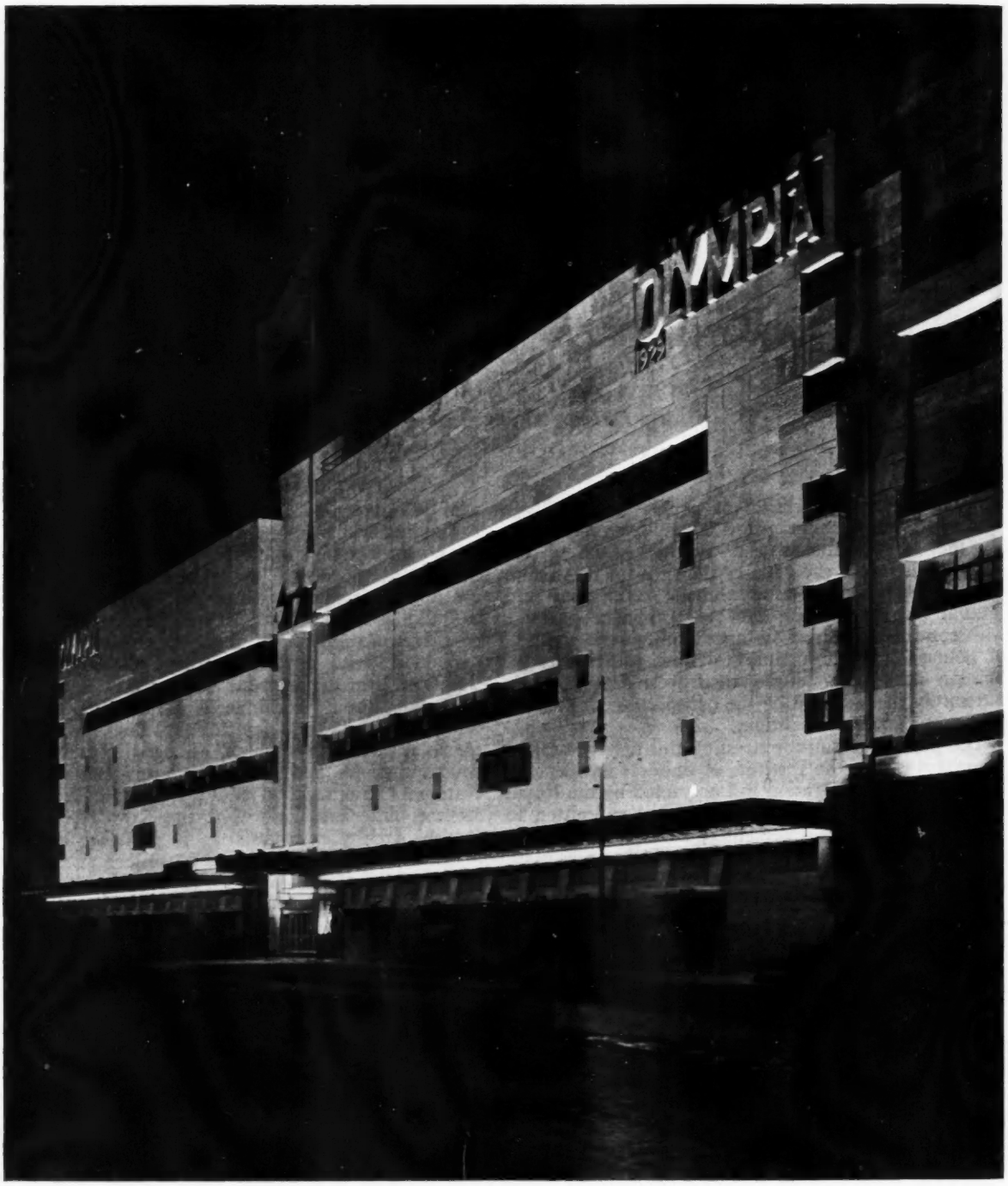
The present reason for stressing this appeal to consideration is that the Institute of Builders has decided to oppose the Registration Bill promoted by the Royal Institute of British Architects, and has submitted to the Privy Council a statement of its objections to this measure. Now the Institute of Builders is a small but powerful body which has an academic status. The National Federation of Building Trades Employers is a very much larger and still more powerful body, which, however, has not directly associated itself with this appeal to the Privy Council. The two societies, however, have common objects, and there can be no question of the Royal Institute of British Architects seeking to play off one against the other.

In a discussion of this nature the utmost candour is desirable, but there is no need that frankness and friendliness should not go together. It is within recent memory that, after negotiations lasting three years, a form of building contract was agreed upon between the representatives of the National Federation of Building Trades Employers and of the Royal Institute of British Architects. This met with, and still meets with, the full approval of the former body, but it was rejected at a general meeting of the Royal Institute of British Architects, whose members repudiated the agreement which their own representatives had negotiated; with the result that a previous form of contract, which in some respects is cordially disliked by the builders, still remains in force.

As is well known, the main object of dispute concerns the right of the architect to compel the contractor to pull down and re-erect at his own expense any part of a building which in the opinion of the architect does not conform to his specifications. Fortunately, matters have by no means reached an impasse, and discussions are now proceeding between the National Federation of Building Trades Employers and the Royal Institute of British Architects in the hope of coming to an agreement with regard to the Form of Contract. Surely it is in the interests of both parties that these discussions should continue in a spirit of amity and reach a satisfactory conclusion. But how is this possible if a body which, though of independent constitution, is yet intimately associated with the National Federation of Building Trades Employers, seeks to interfere with what the Royal Institute of British Architects regards as a perfectly legitimate attempt to set its own house in order? This action on the part of the Institute of Builders, if persisted in, will cause deep and bitter resentment in the architectural profession.

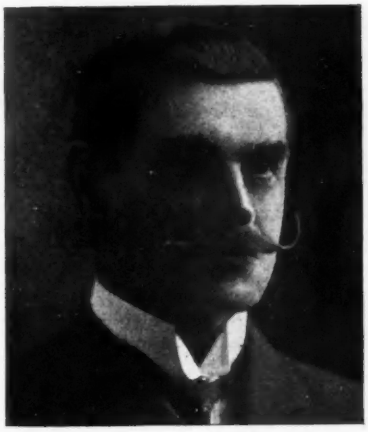
What is the burden of complaint made by the Institute of Builders in their submission to the Privy Council? The greater part of it consists of statements of opinion upon matters with which the Institute of Builders is not directly concerned, while the only grievance or apprehension of a grievance which seems to touch upon the specific interests of the profession of building concerns the control of education. Yet the desire of the Institute of Builders to give their apprentices an academic training is one which has the full sympathy of architects.

Let the representatives of the Institute of Builders, therefore, state clearly the grounds for their belief that Architectural Registration might hinder the fulfilment of the educational ambitions of builders, and we will venture to prophesy that their fears will prove groundless and that the Royal Institute of British Architects will express its complete willingness to collaborate with the Institute of Builders in an educational object which is for the joint advantage of both professions. Before a foolish and totally unnecessary conflict is begun, let counsels of peace prevail.



THE NEW HOME OF THE BRITISH INDUSTRIES FAIR

A night study of Empire Hall, Mr. Joseph Emberton's new extension to Olympia. As will be seen, the elevation has been specially designed so that the horizontal shapes formed by the fenestration, to be used for exhibition posters, can be flood-lit without shadows. The hall was fully illustrated and described in our issue for January 29 last. It is the first multi-storied exhibition building to be erected in this country, and houses a portion of the London section of the British Industries Fair, which opened at Olympia on Monday last.



James Miller, of Glasgow, who, with James B. Dunn, of Edinburgh, both being well-known architects, FF.R.I.B.A., has been elected to Academician rank in the Royal Scottish Academy.

NEWS & TOPICS



E. Prentice Mawson, F.R.I.B.A., who read the presidential address of his father, Thos. H. Mawson, at the inaugural meeting in London of the newly constituted Institute of Landscape Architects last week.

THE R.I.B.A.'S VALENTINE

THE Feast of St. Valentine was nobly marked by the issue under that date, on the part of the R.I.B.A., of a definite pronouncement that the Council had decided in favour of the design of the new Institute building being the subject of a competition open to all its members and those of its allied societies. Any other decision would have been inconceivable, but its promulgation is reassuring. There is to be a jury of five assessors—themselves architects of the R.I.B.A.—to be selected by the President and approved by the Council, and, in order to assist in its selection, members are invited to submit to the secretary the names of members considered suitable and qualified to serve.

THE BAD BRIDGE BILL IN PARLIAMENT

The debate on the second reading of the London County Council Bill dealing with Charing Cross Bridge has been, at the time of writing, fixed for today, February 19. Unless there is an eleventh-hour postponement, an important discussion, lasting possibly for two afternoons, is expected. As the Government are supporting the Bill there is little likelihood of its rejection in the Commons, but, in the Lords, there may be a different story to tell. Apropos, the Thames Bridges Conference issued last week a detailed criticism of the deposited plans for Charing Cross Bridge in the form of a statement circulated to all M.P.'s. It is a vigorous statement, as the opening words will show. "This is probably the most important and certainly the most costly scheme for a London improvement that has ever been submitted to Parliament. The deposited plans show that it has been treated as a local problem only. . . . In its present form the scheme would effectually stop developments that are of outstanding importance to London."

*

It then goes on to deal with the deficiencies of the plan under the various heads of cost, town planning, traffic, architecture, etc. It first points out that the scheme is costly, with little hope of recoupment, not only by reason of the long, sterilizing lengths of dark tunnels on the south side, but because the potentially valuable frontage of the new southern embankment is taken up by the railway station and the awkward bridge approach from York Road. There are, by the way, 990 feet of thoroughly dark tunnels in the scheme. From the town-planning aspect it points out what has been many times pointed out in these columns—namely, that the aggravated system of embankments and tunnels with which this scheme is weighted must serve still further to retard the development of South London and the southern bank of the river. Nor on the south bank only will the deadening effect of these embankments be felt, for the Adelphi terrace is shown deprived of through access, and Villiers Street is destroyed.

*

The whole railway from London Bridge to Waterloo should be put underground, and the bridge brought to earth at York Road, so that, without tunnels, York Road and the new bridge approach may become very valuable and important thoroughfares. This, the statement suggests, is probably the best way of dealing with the problem of the railway, and one that would at a blow remove some of the worst features of the scheme. But apart from the many detailed criticisms of the plan, the latest of which is that by Mr. W. D. Caroë in *The Times* of February 17, it is pointed out that from its inception the larger aspects of town planning, which include traffic and development, have not been considered, and indeed it is evident from the results how closely the needs of a body of railway shareholders have been studied, to the entire exclusion of every call for directness, simplicity, dignity and fine planning.

ADVOCATUS DIABOLI

I should have expected an enlightened paper like *The Daily Telegraph* to be on the side of the angels in this matter. Is it not giving a lead in Fleet Street by erecting a fair new building? And has it not just, on the eve of its seventy-fifth birthday, replanned its own pages to meet modern conditions? Nevertheless, one who writes in its columns under the pseudonym of "An Observer" is guilty of remarking, in that tone of indulgent irony, the property of a few delightful scholars and of a host of lesser observers, that after all there is little use in criticizing the Charing Cross scheme when one patchwork will be replaced by another like it. For we shall always be rebuilding piecemeal, says he, and we shall never know what the future will require—so let us go on building piecemeal. This is the type of mind that finds delight in crookedness, and worships all cock-eyed things—so long as they be old. He is the great obstructor of clear thinking, in which he sees no beauty. Over the heads of such are Regent Streets, and Kingsways, and Rue de Rivolis, and Unter den Lindens, and all the nobilities of urban civilization constructed. Nor can he differentiate as bad from good the muddle-headedness that produced Victoria Street from the wide vision that saw a plan of London that would have lasted from the Fire of London to this day.

THE ABBEY SACRISTY : "CHECK!" BY THE DEAN

The Dean and Chapter of Westminster Abbey have now decided to request Mr. Walter Tapper, A.R.A., to consider the possibility of the Poets' Corner site and prepare a report with an estimate of the cost of erecting a sacristy there. Unfortunately, however, the proposal to connect such a building with the Chapter House crypt has been definitely rejected on the ground that such a scheme would necessitate "interference with the foundations of the Abbey." Such a point of view appears to me incomprehensible, unless it represents merely an excuse to justify the Abbey authorities in rejecting a scheme which they do not like. If they are going to ban every proposal for an underground sacristy, it is in the hope that they will ultimately succeed in persuading the public that the original scheme of erecting a sacristy between St. Margaret's Church and the Abbey is the only practicable one. The objections to this latter course have been set forth in these pages on several occasions, nor has any adequate reply been vouchsafed to the argument that a sacristy in such a position would be an artistic blunder of the first magnitude, because an addition to the Abbey at this particular place, however designed, must necessarily appear as an addendum having no organic relationship to the rest of the building, and it would still further obstruct our view of the original north elevation. The objections to the underground sacristy, however, appear to have no kind of validity, for obviously the appearance of the Abbey is neither marred nor even modified in any way thereby, while once the principle of its construction is accepted there is no limit to the amount of accommodation which may be provided.

★

Writing in *The Morning Post*, Mr. Reginald Grundy, who is presumably interpreting the views of the Abbey authorities, points out that the sacristy which could be erected on the Poets' Corner site could not afford room for State biers and other important pieces, and it would also be too small to allow of any public display of the interesting vestments and plate belonging to the Abbey. The Advisory Committee appointed by the Dean and Chapter never thought that it would, and consequently they recommended that the crypt of the Abbey should be connected with the building on the Poets' Corner site by means of a staircase and underground passage. To describe this quite simple piece of engineering as "a destruction of the ancient fabric" is surely a misuse of words. The phrase "interference with the foundations of the Abbey" is also a misleading one in this connection, for it implies, and is intended to imply, that the act of cutting a passage into the crypt would necessarily injure the foundations of the Chapter House and render them less secure than they are at present. But this supposition is not justified in logic, and if the Abbey authorities really wished to have trustworthy information upon such a point they would call in experts in engineering. Let the Dean and Chapter themselves choose engineers of acknowledged reputation and publish their report upon the question at issue.

THE INSTITUTE OF LANDSCAPE ARCHITECTS

It is remarkable that during the long period in which the design of public parks has been passing from the hands of architects and competent designers into the inexpert ministrations of borough engineers and surveyors, there has been no concerted effort either to keep the work in safe hands or to educate those into whose hands it has fallen. The level of design of all kinds of public parks is now so lamentably without grace, taste or vision, that the newly-formed Institute of Landscape Architects, before whom Mr. Mawson's presidential address was read last week (see p. 330), will be hard pressed to make up for the time lost and opportunity wasted. There is no branch of architecture—for the design of parks is well within the strict province of architecture—so lamentably in need of an infusion of fresh artistic stimulus. At the moment it is without ideas or direction, or any backing of culture or scholarship, and our public parks and playgrounds are barren. The new Institute should have all the backing of the R.I.B.A.

WHAT MAKES "A GOOD SURVEYOR"?

I felt at the time of Mr. Baillie Scott's paper on "Building By-Laws and Rural Beauty" that he and many who spoke were unduly hard upon the surveyor in so far as he was an administrator of sanitary laws, and not half hard enough upon him in his capacity as architect and perpetrator of negative horrors. Mr. C. B. Borthwick, the Surveyor to the Welwyn R.D.C., writes to the R.I.B.A. Journal complaining very justly that the by-laws are one thing, and the administrator of them another. It is indeed hard that the qualities that make a good surveyor in the eyes of those who employ him should make him a butt for professional humour. It is hard; but yet I feel that really good surveyors can be the friend of architect and councillor, and that the source of friction lies in the point of view evinced by the representatives of local government, whose ideals run so constantly away from what is good and well done to what is meretricious and in bad taste—and these are the employers of the surveyor, and the enemies of the good architect.

POOLE HARBOUR BRIDGE

There is a scheme afoot, a financial money-making scheme, to throw a bridge across the mouth of Poole Harbour, in order to open up the Isle of Purbeck to the type of seaside development which always sounds well on paper and looks ill in fact. There is keen opposition (and no wonder!) to the erection of a high steel bridge, and petitions are to be lodged in Parliament by the residents, local authorities and others who think that the quiet beauties of the Isle and the "Little Sea" are worth more to the world than any further extension of the blousy complex of Bournemouth. I feel that the opposition is right. Once upon a time, and perhaps once again in the future, we may develop the taste that will give us the right to replace a beautiful coastline with an ordered architectural beauty; but at this moment the financial mind is badly advised, and should be kept off beautiful places, as an unruly child is kept out of reach of delicate and costly china.

R.U.R.

I was impressed by the performance of Karel Capek's fantastic play, "R.U.R.," given by members of the Architectural Society of University College, Gower Street, last week. Its highly sensational character calls for acting of a restrained nature to give it a sense of realism, and this was admirably accomplished. In fact, I began visualizing what would happen to architecture if, as in the play, the Robots—the machine men—conquer the world and produce houses by the thousand.

ASTRAGAL

THE BATTLE FOR ARCHITECTURAL REGISTRATION

BY A. TRYSTAN EDWARDS

SUCCESSIVE councils of the Royal Institute of British Architects have suffered disappointments in their efforts to persuade Parliament to pass a Bill for the registration of those who are genuinely engaged in architectural practice and possess certain minimum qualifications for it. I do not know what are the precise views of the heads of my profession concerning the reasons which have induced Parliament to refuse their request, but I suspect them of believing that they need only try again in the same old way and if they persist long enough they will gain their object. They regard their failure as due to the ignorance or apathy of individual members of Parliament who, they like to believe, need only become a little better informed concerning the functions and status of the architectural profession to grant its claims at once. Just a little more propaganda, a combined push, and the thing will be done! Does it ever occur to the leaders of the profession that there may perhaps be some elements of weakness in their case and that even the stupid members of Parliament are, subconsciously perhaps, aware of this?

There are two sides to Registration. One of them appertains to architecture as a profession and the other to architecture as an art. The object of the Registration Bill is to raise the prestige of the architectural profession by excluding from it two classes of people, namely, those who refuse to conform to an honourable code of professional conduct, and those who would offend in a quite different manner by displaying incompetence in design. It is necessary very clearly to separate these two aspects of Registration for, failing this, the strategy and tactics of those who direct the campaign on its behalf are sure to be at fault. It may be convenient if I continue the military analogy still further and say that the fighting front of the Registrationists has two distinct sections. These may be described as the *professional* front and the *æsthetic* front. The professional front is very strong, but the æsthetic front is vulnerable. Why not admit this and try to remedy a defect that may be one of the causes of failure of the Registrationists to achieve their aim? I propose to make an unauthorized inspection of both these fronts. But before embarking upon the more unpleasant and difficult part of my tour I propose to make a few observations upon "the *professional* front," where I find that the defences are very strong and the communications excellent.

There are certain things which nobody who describes himself as an architect should be allowed to do, and people who do these things should be definitely excluded from the architectural profession, even if they possess considerable artistic talent. This may seem a hard saying, for it may plausibly be argued that the main object of architecture is to create buildings which not only fittingly serve their purpose but are also beautiful, and if a practitioner succeeds in fulfilling both these objects he has served the cause of architecture well. He is a better architect, it may be contended, than one who slavishly follows the professional code and yet designs badly. Yet the reply to this is obvious. By insisting upon a compliance with the professional code we are not expressing any hostility to artistic talent nor depriving it of its opportunities. The indifferent designer cannot at will develop into an artistic genius, but the clever designer certainly can, if he wishes to do so, conform to the professional code and, in the interests of the profession as a whole, it is desirable that he should be compelled to do so, or else be deprived of his professional status.

It is desirable, too, that a person employing an architect should have assurances that his agent is free from the slightest suspicion of making any profit from the sale of building materials or accepting commissions from any of the parties concerned with the work, with the exception of the client himself, whose interests he is paid to subserve.

The complete separation of the functions of architect and builder is essential if the professional status of the former is to be maintained. And even if it were to be found that certain men with a special gift for the organization of building were at the same time architects of the works the erection of which they were supervising, it would be still inadvisable to encourage such a practice unless special safeguards were introduced. For there can be no question that the normal relationship between architect and builder which with such great difficulty has now been established is in the best interests of both. The builder serves his office with the greatest efficiency if he devotes himself to the task of organizing the work of erecting a building designed by an architect, and the architect has surely a difficult enough job if his energies are confined to tackling the intricate problems of design, planning, and construction of buildings without worrying his head about the purchase of materials and their assemblage upon the site, the hiring of labour and such matters.

The advocates of Registration have also an unanswerable case when they would insist that an architect claiming professional status should be debarred from adopting certain underhand or unworthy methods of obtaining work. The question of how far an architect should advertise himself is, I understand, still being considered by the Practice Committee of the R.I.B.A., but here, also, it is obvious that while some methods of advertisement might be legitimate, others might be injurious to the repute of the profession as a whole; and the R.I.B.A. will be justified in defining very precisely its point of view on this matter and in taking punitive measures against those who disregard it. For while architects should be known as designers of good buildings, it is also essential that they should be regarded as a body of honourable men.

If Parliament were asked to give its assent to a measure which was designed to establish nothing more than that the name of "architect" should be reserved for those who are ready to uphold a certain standard of professional conduct and, in addition, have achieved a certain competence in dealing with the practical side of architecture, it is extremely unlikely that so reasonable a request could be refused. Let the Royal Institute of British Architects, while reserving to itself the opinion that it is an association of artists, maintain a discreet silence concerning this while making its claim for Registration, and come before Parliament as a body of honourable and competent practitioners who desire nothing more than to establish their professional status. If, however, architects insist upon talking about Art with a big "A" they must expect nothing but disdain from Parliament unless they show themselves to possess a definite æsthetic philosophy. I propose to discuss this aspect of the problem of Registration in another article, which will be devoted to what I have here described as "the *æsthetic* front."



" Le bar " is finished with imitation birch-bark paper on the walls, and has columns of waxed oak. Tables and chairs, in the same wood, complete a conventional scheme.



A general view of the new of the rue de Sèvres (left)



Au Bon Marché, Paris.]

" Le hall," seen from the grand staircase, in marble, leading up from the ground floor " galeries." The view point can be identified by reference to the ground plan reproduced on page 314.

BEDIZENED &

New Annexe for the

(L. H. Boileau,

BY P. MORTON

NEW styles proverbially assume their extremer mannerisms in their opening and closing phases. Posterity will probably identify the first decade of Modernism with the imposition of a decorative prohibition, and decide that under a universal Fascist regime at the beginning of the twentieth century architecture went "flat," much as the United States went "dry." The structural theorists who have held the field since the war proclaim the dogma that a façade adorned is a façade accursed, an unclean—or, at all events, an unhygienic —thing.

Now, raw concrete and gypsum can frown in their orthodox, but cheerless, state of grace as repressively as the drabbest brick or sootiest stone that ever sanctified a Primitive Methodist tabernacle. The " root-and-branch " austerity of this neo-Puritan style is so absolute and immutable in its geometric predestination to monotony that the only chance of any wider development must lie in a partial relaxation of that very salutary plainness which constitutes its principal doctrine. Reaction was inevitable. The ungrateful soul of man, though satiated with the architraved Renaissance wedding-cakes and porticoed champagne-fountains of the last century, still obstinately craves for the smaller cakes and ale of architecture, and will not be denied. The



furnishing annexe at the corner and the rue du Bac (right).



An interior view of the firm's branch in the Champs Elysées, designed by M. L. H. Boileau, the same architect responsible for the main building here illustrated.

BEJEWELLED

Bon Marché, Paris

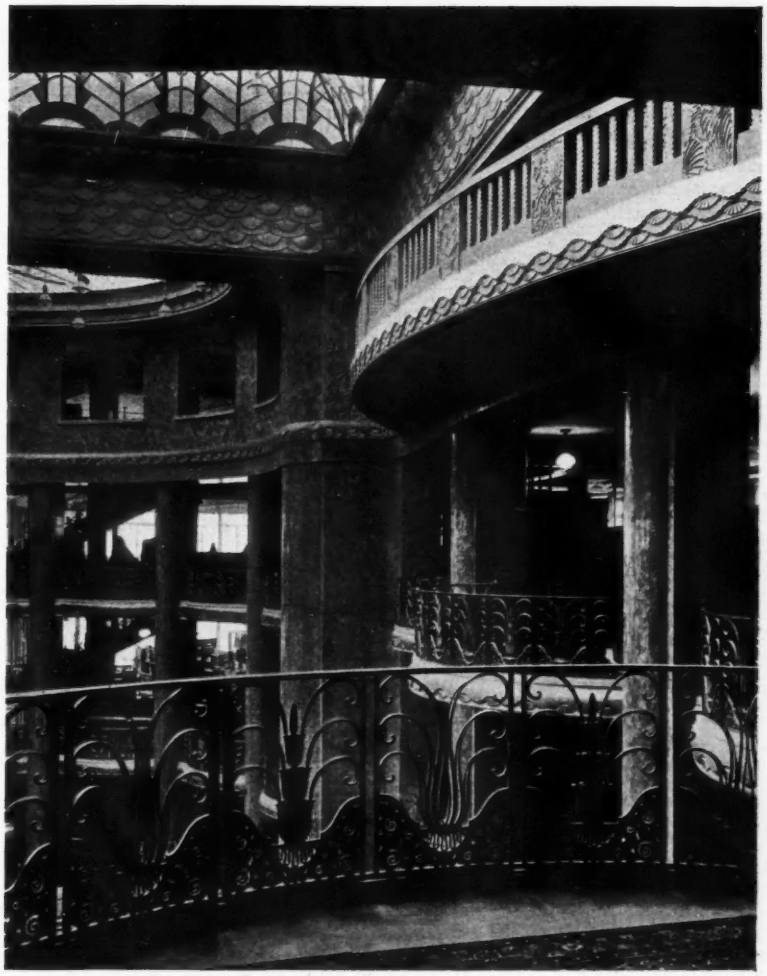
architect)

SHAND

process of modifying the new architectural creed from a superhuman to a merely human scale of renunciation promised to be gradual, and the result is all the more hopeful on that account. It is something of a shock, therefore, to find a notable building, finished within the last twelvemonth, which betrays unmistakable signs of being decadent in its brave parade of Modernism.

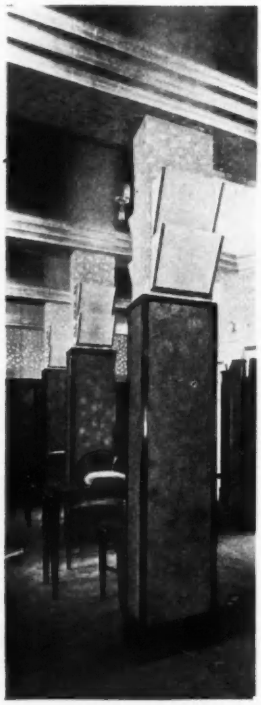
Fashion is a goddess more powerful and dreaded and more implicitly obeyed in France than in England. It seems probable that the architect of the new extension of the Bon Marché has worked in, rather than been converted to, Modernist idioms; and that he could have produced what Americans call a " Louis style " building just as easily and perhaps more satisfactorily. Moreover, proprietors of large emporiums, especially in Latin countries, notoriously demand plenty of pomp and glitter. Monsieur L. H. Boileau has given the directors of the Bon Marché all they could reasonably require. It would be interesting to know to what extent they gave him a free hand.

The new annexe of the Bon Marché (which houses its various furnishing departments) is certainly a very modern building, but it is also a very florid and even a garish one. If undeniably over-ornate, however, this besetting

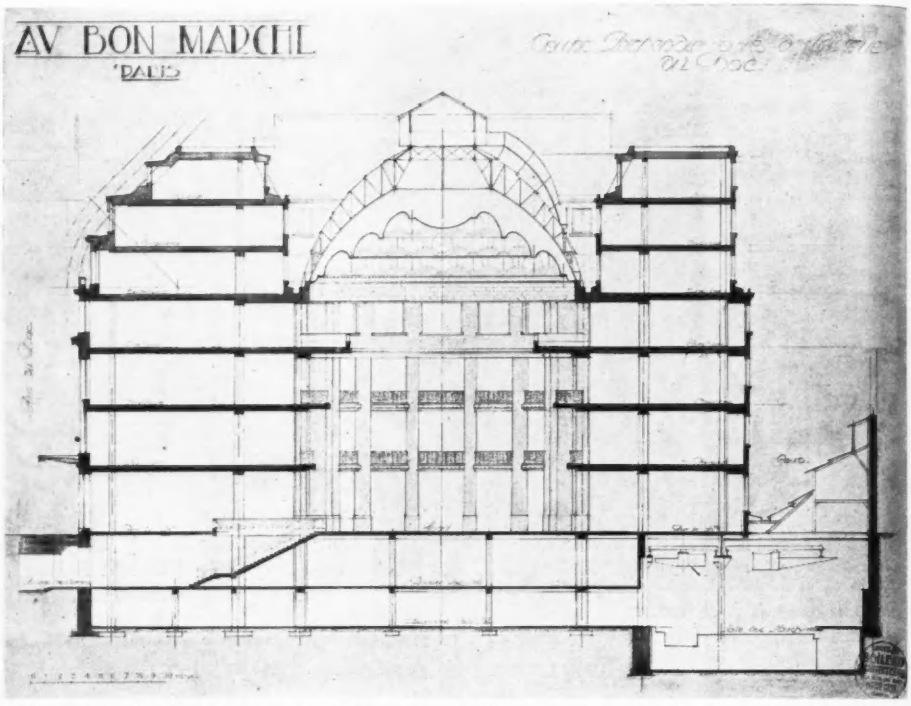


[*By L. H. Boileau.*

Looking across " le hall " from a second-floor balcony towards the domed semi-circular space whose centre is on the axis of the corner entrance. The balustrades are finished in burnished bronze.



The rectangular idea in lighting fittings in the barber's shop.



The architect's drawing of a cross-section, taken on the centre-line perpendicular to the rue du Bac. There are two basement floors, of which the upper has a subway connection with the firm's older building across the street, and seven shopping floors on ground level and above.



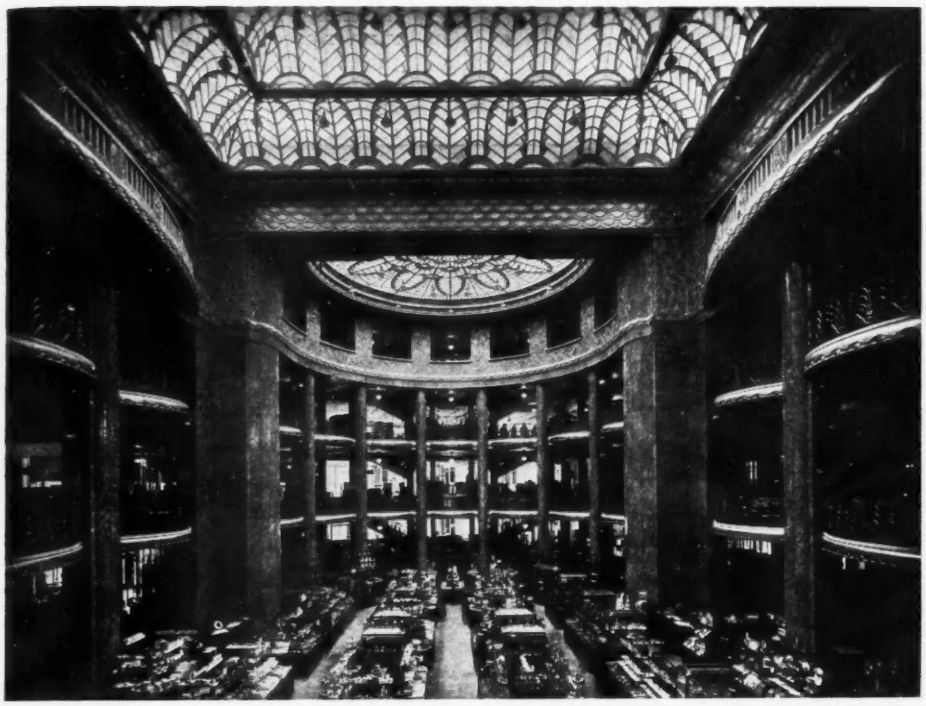
Au Bon Marché, Paris.]

The elaborately designed cupola over "le hall," which extends through four floors, and is therefore visible from the ground floor. The number of lamps provided, quite apart from the central cluster, is noteworthy, and eloquent of the desire for sparkling effect.

fault is at least expressed in a manner that is in many respects original. Much of the interior detail, though largely submerged in the too luxuriant opulence of the whole, is both excellent and carefully thought out.

The site is a corner, but not an island, one, separated from the lamentable parent building on the rue de Sèvres—perhaps the shoddiest-looking departmental store in Europe—by the rue du Bac. Externally, it seems at first sight a typical and distinctly ordinary example of the big shop. Like the original structure alongside, to which its proportions are assimilated, it is too low for the length of its frontages. The average shopper will probably remain unaware of the unobtrusive modern details which have been discreetly grafted on to its nondescript façades. The entrance is entirely commonplace, while the almost conventional bronze marquises cannot for a moment sustain comparison with the beautiful and effective design recently adopted for those of the Galeries Lafayette. The casement infillings are of bronze, burnished a rather ugly and dingy tint; and the piers between them apparently of polished Hauteville stone. The two attic stories are particularly unsatisfactory.

The interior—as is the usual but rather wasteful practice of large shops on the Continent, exemplified by Wertheim in Berlin and the various



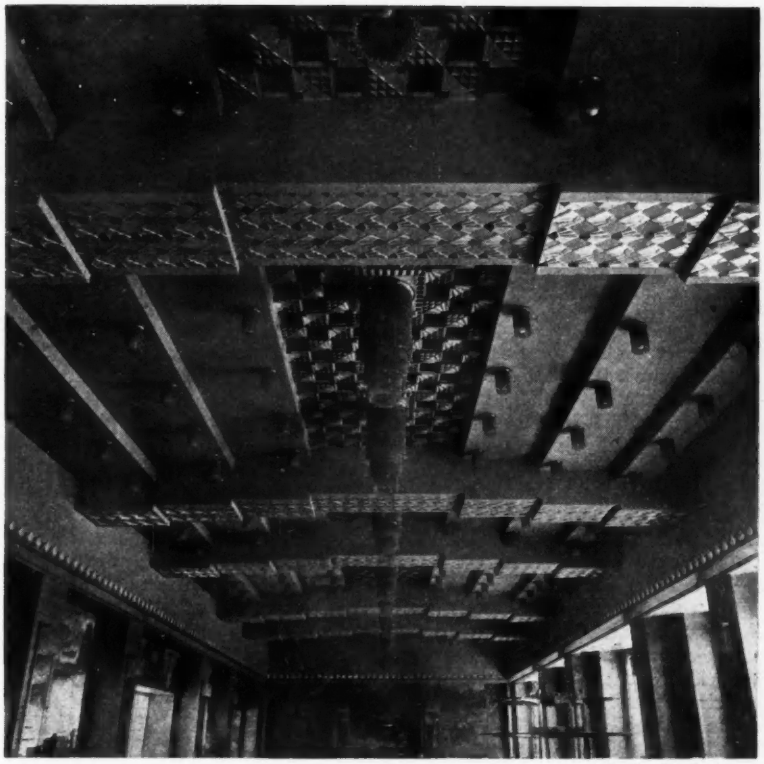
A comprehensive view of the various shopping floors, looking towards the rue de Sèvres from the vantage-point of a first-floor balcony. The arrangement of the stairs from floor to floor in symmetrical pairs may be traced. The pillars are cased in old-rose composite marble.



The circular idea in lighting fittings in the main entrance.

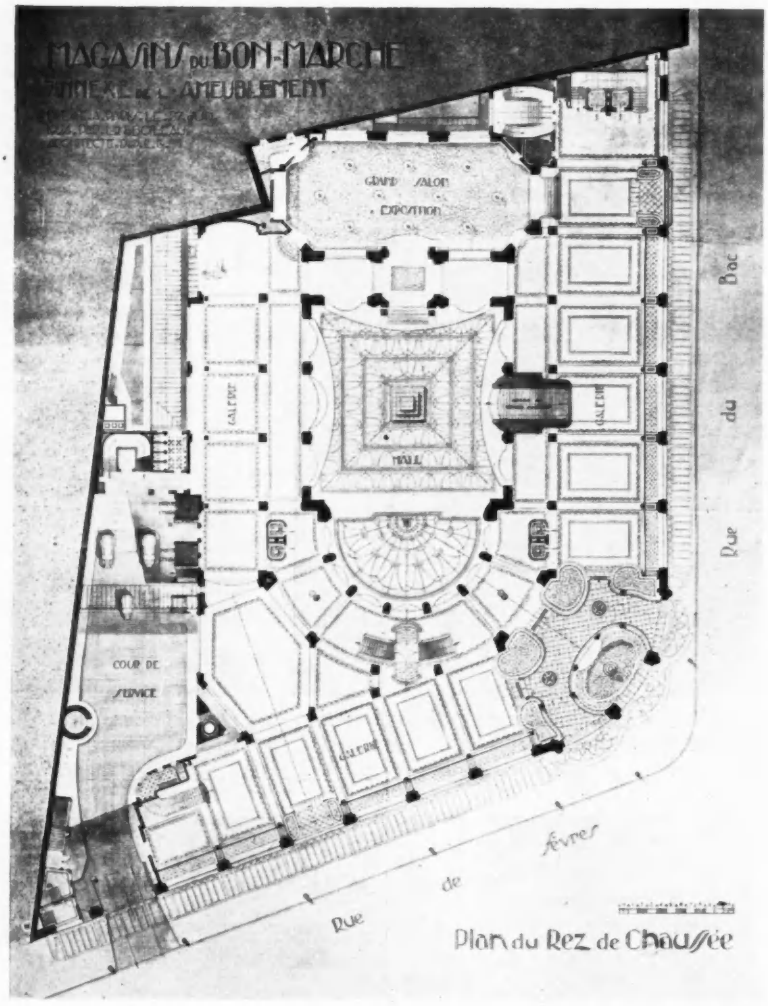
Warenhäuser Tietz in the more important German towns—consists of an immense rectangular well, unobstructed from ground to roof levels, surrounded by three tiers of balconied galleries. Four massive piers support the square of girders carrying the coved skylight roof; with two subsidiary columns on each of three sides, and six on the fourth, which is curved into an apse. These are all cased in an old-rose coloured composite marble.

The main staircase, with its double flight of steps, which shows a marked Egyptian influence, is rather overpowering in its scale and emphasis. The balustrades of the staircases and balconies, like the two successive dadoes above the heads of the columns, are of burnished bronze. The top balconies are protruded in graceful segments. The great convex skylight is arranged in a subdued and very skilfully composed colour-scheme based on a design of stylized lotus leaves. Perhaps the best detail of all is the balustrading: a curious, essentially modern, pattern of whorls, rather suggestive of the way in which the tenuous leaves of hyacinths curl back to the ground when their blooms begin to wither. This is really fine work, though overrich, which would probably have been all the better if it had been executed in plain wrought iron, instead of rather shiny bronze, with a little judicious pruning.



[*By L. H. Boileau.*

The ceiling in the "salon de thé," showing an inverted stepped motive combined with an intricate pattern of coffering, and a scheme of lighting in which the lavish provision of ornate lighting fittings plays its part in setting the room a-glitter.



Au Bon Marché, Paris.] [*By L. H. Boileau.*

The architect's drawing of the ground-floor plan, showing the wide range of display "galeries" surrounding the central "hall," and, on the left, the service quarters and court for delivery vans. The scale is in metres.

The general effect of this lofty and capacious vault is rather too evocative of that coruscating hothouse art which the vulgar mind is apt to consider synonymous with the more fabulous splendours of "luxury." There is the same sense of light and space without air as in a vast conservatory of rare, exotic plants. The cumulative impression caused by such a clash of interweaving, but often internecine, rhythms of over-elaborate pattern, combined with this profusion of richly sombre colour, dully glinting metal and semi-iridescent glass, is almost overpowering. Indeed, the view from the middle balconies irresistibly suggests the vaguely Oriental setting of some pantomime transformation scene. It is only fair to add that the *ensemble* looks far better in these photographs than in its polychrome and glassily metallurgic reality.

M. Boileau has also designed a new restaurant and bar for the old building. The former is decorated in dull gold and brown, and in spite of having large blue windows (or so, at least, they appear in winter twilight) is decidedly gloomy. The ceiling has a restless, overcharged design with which the lighting is not very skilfully amalgamated. Though made by Ruhlmann, the furniture is without the usual distinction of this artist's work.

LAW REPORT

DANGEROUS STRUCTURE NOTICE—IMPORTANT DECISION

Jackson v. *Solomin.* *King's Bench Division. Before Mr. Justice Wright*

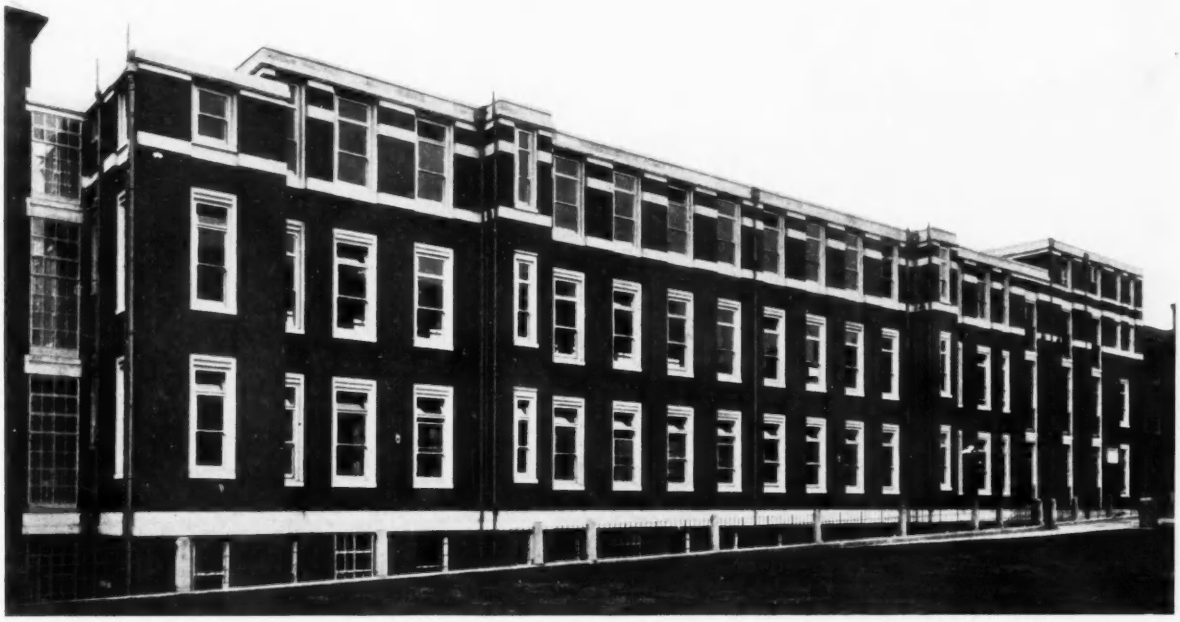
THIS action was brought by Mr. L. Jackson, of Glenavon, Gloucester Gate, London, W., against Mr. M. Solomin, of Soho Street, London, W., to recover possession of 11 Soho Street, on the ground that defendant had forfeited the lease in consequence of breaches of covenant to execute certain repairs set out in a dilapidation notice served in March, 1929.

Mr. R. O'Sullivan, for plaintiff, explained that the premises were some 200 years old. The lease in question was for 11½ years, ending March, 1933, at a rental of £130 per annum, and under it the lessee agreed to paint and repair the interior and to execute such exterior repairs as were required every seven years. A dangerous structure notice under the London Building Acts was served on the owner or occupier by the London County Council in October, 1927, calling upon them to do certain vital repairs to walls, floors and chimneys. The plaintiff thereupon sent that notice to the defendant, together with a notice and schedule of dilapidations. The defendant then set up that he was not liable in view of the age of the building, but said that as soon as plaintiff complied with the demands of the dangerous structure notice, he would comply with the schedule of dilapidations. In the end the L.C.C. demolished the top two floors and Counsel contended that the defendant was liable under his lease to make good those floors. It was because of the defendant's default to do what was necessary that the L.C.C. demolished the two floors.

Mr. Woodgate, for defendant, submitted that the defendant had done all the repairs that could legally be demanded of him, and that the plaintiff could not expect him to take down and rebuild portions of the buildings which had fallen into disrepair because of the old age of the premises. The upper portion of the premises became unsafe owing to original faulty construction of the building, and the top portion could not be rebuilt unless the lower portion was demolished and reconstructed.

His lordship, in giving judgment, said he found as a fact that substantially the whole of the building had had to be pulled down. If he had found that only a building up on an existing construction had been necessary, he would have come to a different conclusion.

But here he was faced with the certainty that the whole of the party wall would have to be rebuilt right down to the basement. Probably there would have to be an entirely new method of construction in order to bring the building up to the limit of what was fairly called repair, and renewal of a subsidiary part. In his opinion the claim to forfeiture failed, and he entered judgment for the defendant with costs.



The east elevation of the new Sir Edward Wood wing, which was opened by the Duchess of Rutland last November. Externally the building is faced with tapped red wire-cut bricks of uniform colour. The dressings are of reconstructed Portland stone.

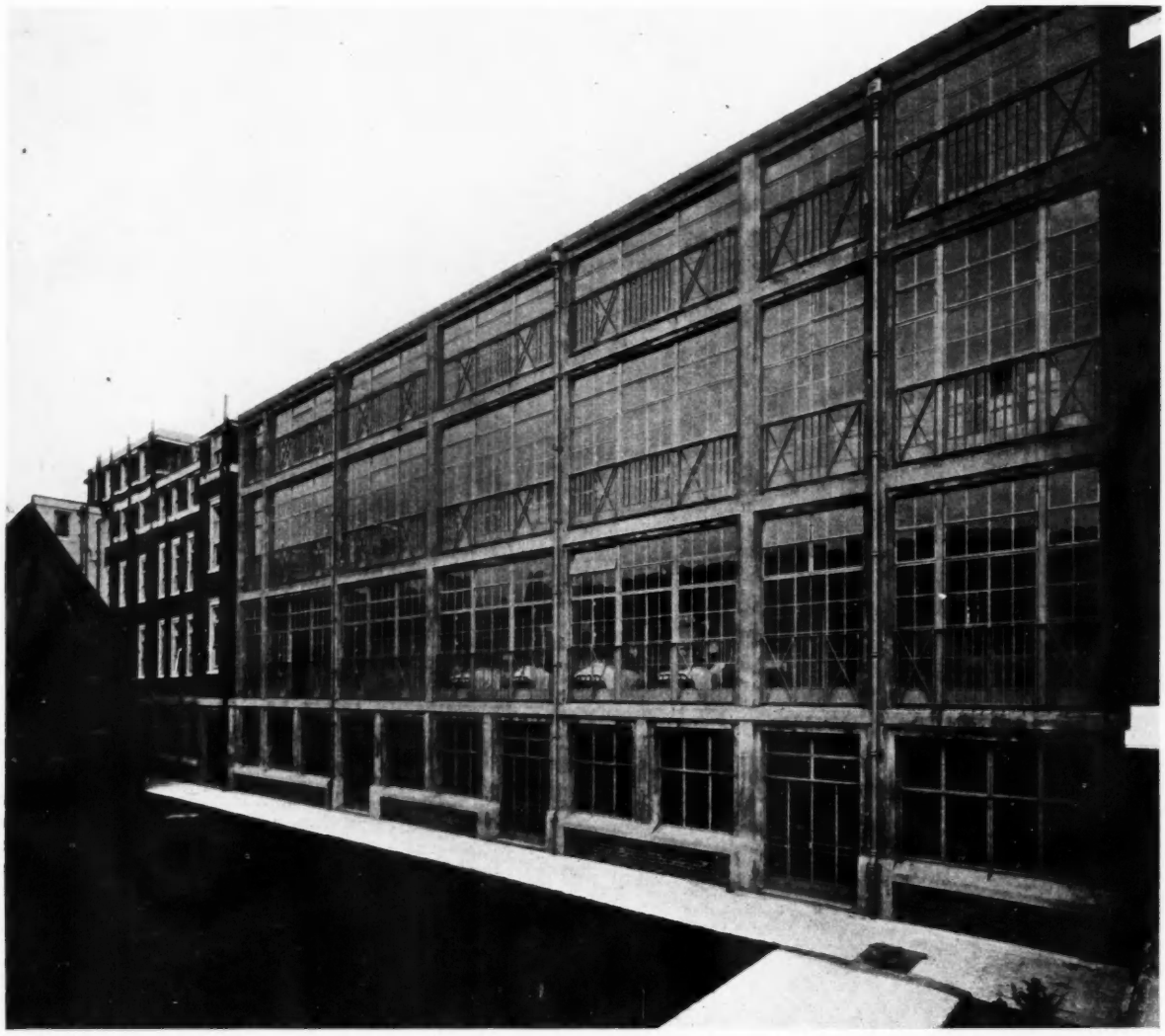
LEICESTER ROYAL INFIRMARY: NEW WING

DESIGNED BY PICK, EVERARD, KEAY AND GIMSON

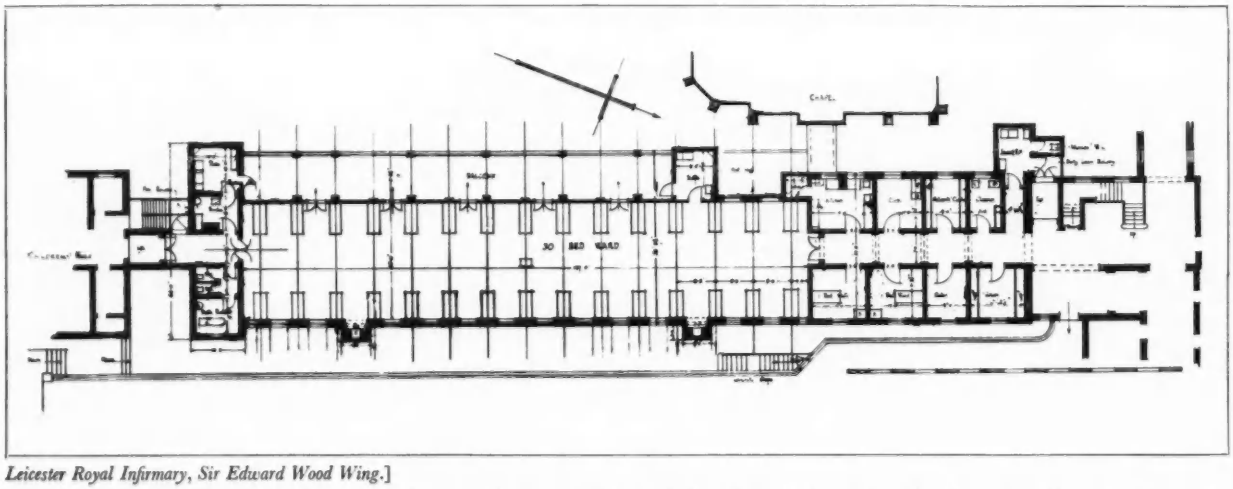
THE new Sir Edward Wood wing was opened last November, exactly sixty-seven years after the completion of the old building, which was demolished in 1928 to make way for the new wing. Before building operations could begin, accommodation had to be found for the domestic servants, housed in the old building. A house near-by the infirmary was purchased as a home for eighteen servants and a superintendent,



The ward on the first floor. There are three wards in the new wing, the other two being situated on the ground floor (see next page) and the second floor respectively. Each accommodates thirty beds and two one-bed wards.

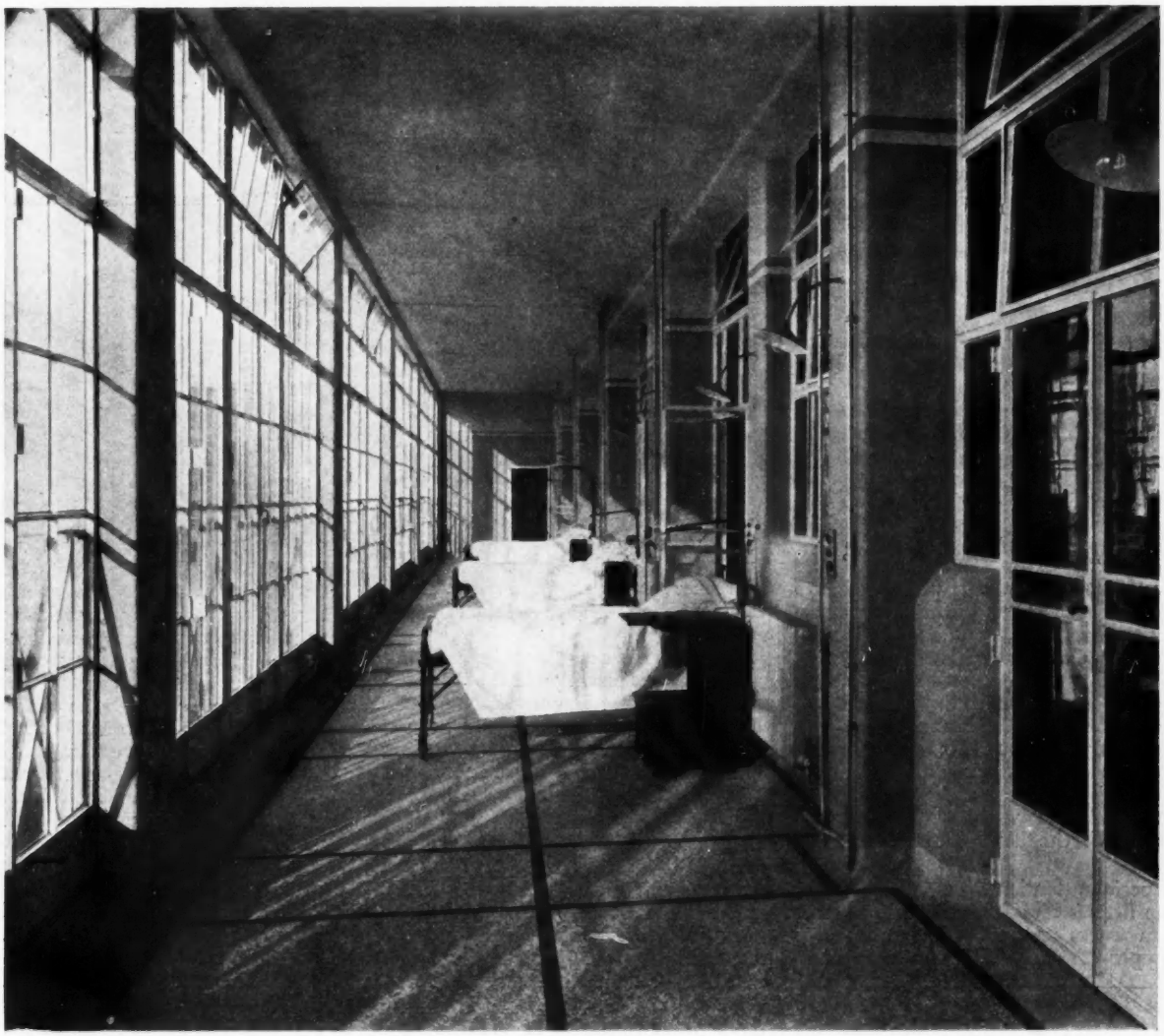


On the south-west elevation are the sun balconies and the nurses' dining quarters. Each sun balcony is 96 ft. long and is of steel-framed construction, with the stancheons encased in concrete. The divisional wall between the balcony and the ward is glazed as much as possible to give a cheerful and airy appearance.

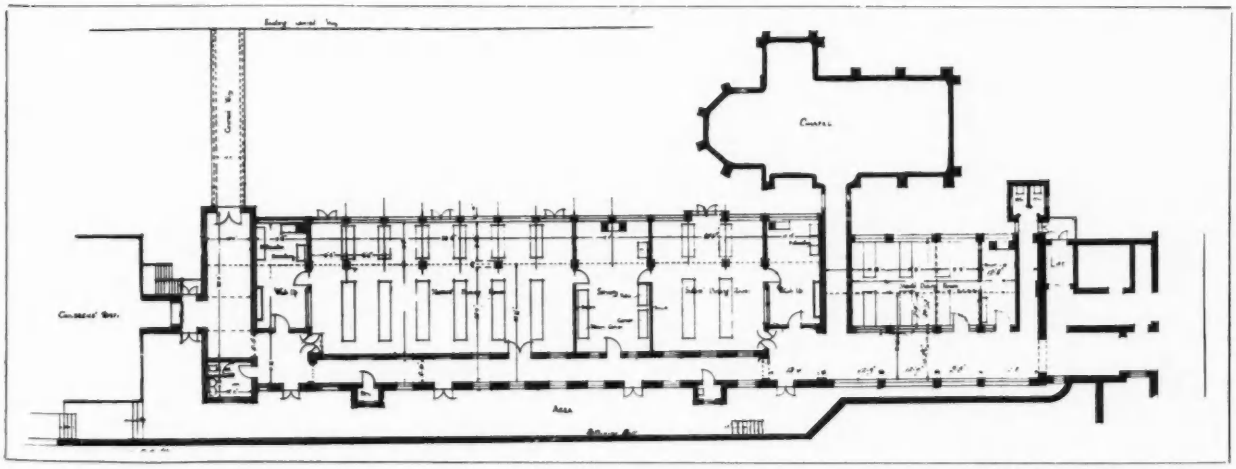


Leicester Royal Infirmary, Sir Edward Wood Wing.]

Ground-floor plan. All the fires in the new wing are electric, including those in the centre of each ward. Every bed is provided with a wireless plug and headphones. Rubber buffers in the rebates of the door frames reduce noise from banging.



The sun balconies are enclosed with steel glazed screens, having folding doors in the lower portion and swinging casements above, hung on friction pivots. Sufficient obscured glazing is provided in the windows of the divisional walls to give privacy for the patients. Each balcony is warmed and planned for easy access to the sanitary annexes.



[*By Pick, Everard, Keay and Gimson.*

On the lower ground floor are the sisters', nurses' and maids' dining-rooms, servery, and wash-up rooms, and a corridor to link up the children's hospital with the main building. The entrance to the chapel was preserved in erecting the building.





Two views in the new suite of operating theatres. Left, the corridors looking north towards theatres numbers four and three ; right, theatre number three.

a temporary ward for thirty patients was erected on the infirmary site to ease the pressure on the bed accommodation, and temporary dining quarters were provided for the sisters and nurses.

The new wing comprises a lower ground floor, containing the sisters', nurses' and maids' dining-rooms, servery and wash-up rooms, and a corridor to link up the children's hospital with the main building, and ground, first, and second floors, each containing one ward. On the third floor is the matron's flat.

Special attention has been given to the fittings and furnishing. The bed-pan racks are of chromium-plated copper-tube boxes. Steam-heated hot-water bottle tanks are provided, and a crockery sterilizer and a steam plate-warming cupboard are installed in each ward kitchen.

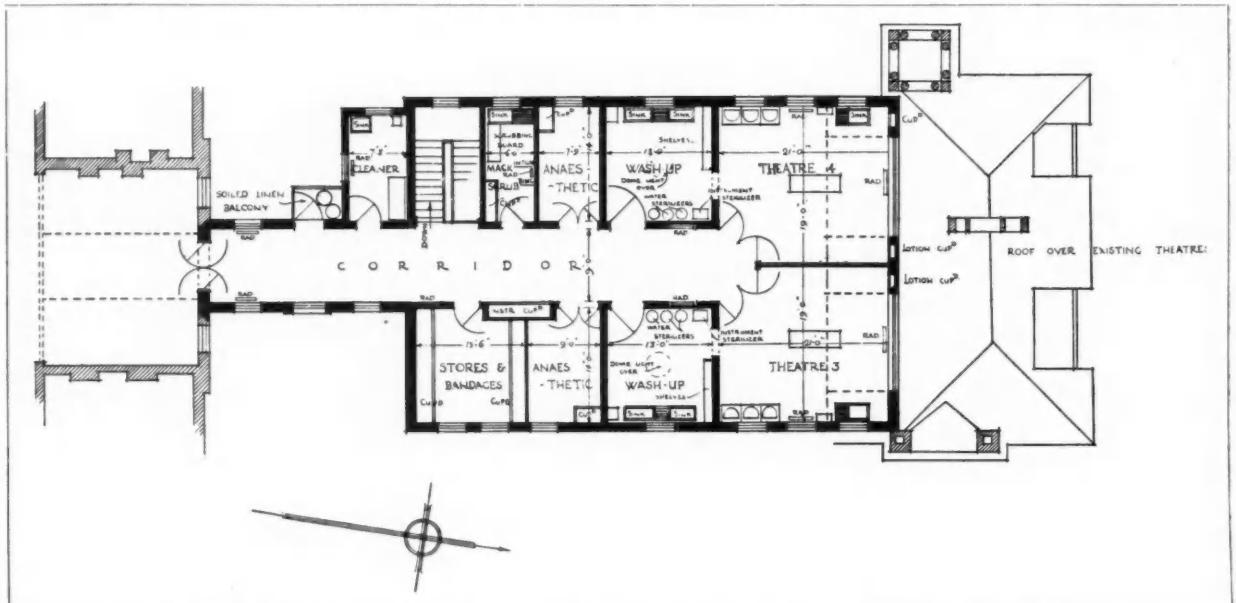
Steam-heated carving-tables and hot cupboards are provided in the serveries, with teak sliding serving hatches over. There are also a coffee-making set, a small refrigerator, electric dish-washing machines, and a burnishing machine. Electric plugs for floor-washing machines are also provided.

The floors are of terrazzo and the plastering throughout is in cement. Cream glazed tiles line the sanitary annexes and other rooms. The floors are of hollow concrete beams, with metal lathing and flush ceilings.

THE NEW OPERATING SUITE

The additional suite of operating theatres is connected by a corridor and a new staircase to the Queen Victoria Memorial wing. The story containing the new suite has been erected without interference with the operating work of the hospital on the floor below.

The walls of the theatres and wash-up rooms are lined from floor to ceiling with vitrolite. Stainless steel angles are provided in the opening between the theatres and wash-up rooms to protect the wall lining. Framed copper gauze windows are inserted in the summer to prevent the entrance of flies. The doors are made of teak and have flush surfaces.



Leicester Royal Infirmary, Operating Suite.] [*By Pick, Everard, Keay and Gimson*

Plan of the new suite of operating theatres. Planning was governed largely by the position of the existing walls and the extent of the existing buildings.



ENGLISH PRECEDENT

No. 103

HOUSES,
NORTHGATE,
WARWICK

Once an old coaching house, known as "The Lamb and Flag," through the central doorway of which the London and Birmingham mails rolled in, this early Georgian building is now converted into two houses.

Built of 2½ in. bricks with local stone dressings, it has a bold stone cornice with a projecting central bay, the gable having a painted sun-dial within an oval stone surround. The tiled roof is somewhat over-dormered, but these windows are attractive by reason of their alternate curved and pointed pediments.

—[C. M. C. ARMSTRONG]

JAGO *v.* SWILLERTON AND TOOMER

In the matter of the Arbitration Act, 1889

BY KARSHISH

This is an action before an arbitrator, brought by Colonel Jago, J.P., jointly and severally against the builder and architect, for damages for the collapse of a village hall. Mr. Chawlegger, K.C., and a Junior represent the plaintiff; Mr. Twistle, the defendant Swillerton, and Mr. Pitfall, K.C.—with him Mr. Wrackem—the defendant Toomer. It is the morning of the third day. Mr. Pitfall has delivered his closing address to the arbitrator, on behalf of the defendants jointly, and of Toomer as against Swillerton; and Mr. Twistle has done the same in the interests of Swillerton, as against Jago and Toomer.

Though the case related is true to life in every particular, the characters named are fictitious.

vii: Mr. Chawlegger's Last Word

DURING the addresses of defending Counsel, Chawlegger had been closely engaged in covering two sheets of foolscap with highly elaborated pencil drawings. The learned Counsel's thoughts that day ran, it seemed, on currant buns and tadpoles—or possibly they were microbes; it is sufficient to say, however, that these drawings were not of a kind suitable for framing. He now leant back easily, half facing the arbitrator, with one elbow over the back of his chair, and held a lapel of his coat with each hand, except when he extended the palm of the right as a conclusive exhibition for the arbitrator's inspection. His utterance was gentle and caressing; his manner one of such charming, indolent assurance as made it necessary for him merely to glance down over his shoulder at the papers his assiduous junior, Gadd, pushed to him along the table. He had the air of a man filled with kindly regret at being obliged to expose the errors of his learned friends; and sometimes, pursing his lips, he shook his head sorrowfully; it was very sad, of course, but he was compelled to point out that the contentions of the other side would not do at all.

During Chawlegger's speech Twistle was industriously drafting an opinion on another case, and Pitfall—with him Mr. Wrackem—with legs stretched out, arms folded and eyes closed, incontinently went to sleep; that at least was the picture they presented, but the alertness with which Wrackem opened eye on a fly that hovered for a moment over his forehead, and the repeated sucking in of his cheeks by Pitfall, indicated that the unconsciousness of Chawlegger's learned friends was not so profound as appeared. The etiquette of the Bar—where men of the finest sensibilities and keenest discernments are pitted against one another, furnished with every weapon with which wit, sentiment, ridicule, law and logic can arm them, and where the fiercest controversy awakens no animosity—enjoins a nice observance of fair play; and the demeanour of defending Counsel was no doubt assumed to leave an unembarrassed field for an opponent who was, physically, scarcely a yard in front of their noses.

Mr. Arbitrator (Mr. Chawlegger began), I have listened—as **you, sir,** have listened—with great attention to the addresses of my learned friends. I do not know, sir, how far the ingenious display of facts presented to you, and the no less ingenious arguments advanced by my friends, may have impressed you; but they **have,** sir, I make bold to say, succeeded in **this**—they have disposed you to regard the issue you are trying as a **difficult** and **intricate** issue, rather than the very **simple** and **clear** issue it actually is. Sir, I repeat, the issue before you is **simple,** and the issue is **clear;** for what, sir, **is** that issue? It may be fully stated in ten plain words—**"Who was responsible for the collapse of Grastopen Village Hall?"** That question has no more than **four possible answers.** They are: **One,** that the **defendants,** or one of them, are responsible. **Two,** that the **plaintiff** is responsible. **Three,** that **no one** is responsible, and **Four,** that **all parties** to the action are **equally** responsible. This last possible answer I will not discuss; for it is obvious that if **all** parties are **equally** responsible then no **one** of them is, so that answer **four** becomes identified with answer **three** and may be disregarded. I will first address you, sir, on the subject of the **third** answer—namely, that **no one** is responsible.

This was put to you, sir, in a strange way by my friend, when he urged *vis major* as exonerating the defendants for, **if** *vis major* is shown, the whole of my friends' laborious attempts to persuade you that the collapse was due to the **act of the plaintiff** falls to the ground.

Mr. Pitfall: No.

Mr. Chawlegger: My friend says "No"—but if *vis major* exonerates the defendants it equally exonerates the plaintiff.

Mr. Pitfall: Exactly—**If!** I have submitted that *vis major* exonerates the defendants, but that **if** there was negligence, the plaintiff is responsible for it.

Mr. Chawlegger: My point, sir, is that a submission that the collapse of the hall was **not** due to the act of the plaintiff disallows an alternative submission that it **was** due to his act.

Mr. Pitfall: **If** it was not due to what is akin to an Act of God, **then** it was due to the negligent act of the plaintiff. **That** is my submission. My friend is not doing himself justice.

Mr. Chawlegger: So we have it at last! Either the Almighty or my client is responsible, and my friend is unable to say which, but leaves the grateful task of deciding to you, sir. A building-owner entrusts the design and construction of a village hall to a qualified practising architect and surveyor, and a builder of fifty years' standing; the building falls down and my friend says responsibility for the failure lies either outside the world altogether, or with someone who had nothing to do with the construction of the building.

There were moments while my friend was addressing you, sir, when I began to think I was in bedlam. May I remind you of the **justification** for his submission of *vis major*? It was, that the collapse was due to the **coincidence** of the period of the wall synchronizing with the rhythm of the dance. This will not do at all! My friend told you, and **rightly** told you, and has just **repeated,** that *vis major* is an act akin to the Act of God; but in no sense can a **coincidence** be identified with an **act;** the word "act" here expressly establishes

vis major to be an extraneous, adventitious event—an accident; and its employment forbids any sense of a coincidence. The rule is that when the law creates a duty which a person is disabled from performing—without any default of his own—by the Act of God, the law will excuse him; but when he, by his own contract, creates a duty, then he is bound to make it good notwithstanding any accident. A coincidence is **not** an act **nor** an accident, and the defendants themselves created the duty to hand over a properly completed hall when they contracted to design and build it. The error in my friend's submission is particularly flagrant, in view of the particular matters which involve this coincidence. The rhythm in question, sir, was no more than the **usual** and **appropriate** rhythm of a **common** and **popular** dance measure—for so the "gallop" is: the period of the wall was a **static condition** of the wall established in the wall by the defendants. My friend laid special stress on the point brought out by his expert witness, that it was **almost** impossible to calculate the period of the wall, and **quite** impossible to estimate the resistance to overturning exerted by the roof principals; and he blandly asks you, sir, to decide that **because** those matters were not exactly determinable, **therefore** the defendants are not accountable for the period of the wall, and the resistance of the roof, resulting in the collapse of the building. Sir, I do not wish to be unduly crushing in my exposure of my friend's fallacy; I will, therefore, merely remind you of what—as an eminent practitioner of architecture—you are well aware, namely, that in **any** construction there are always **numerous** elements of weakness that cannot be exactly calculated; and that it is a **basic rule** in the science of construction to employ a margin, or "factor of safety," to cover these unknown weaknesses or uncalculable stresses. The usual factor of safety employed by engineers and architects for each part or member of a structure, and which is used in arriving at the working rules and formulæ in daily use, is commonly **four** times, but never less than **three,** and sometimes **five** times the ascertainable crippling load, or breaking strain, but it **may,** in special cases and at the discretion of the designer, be even **higher.** In short, it is the **essential duty** of the designer to make sure that the factor of safety employed by him in every part of a building is **ample** for strength and stability. Can it be said that the factor of safety employed by the defendants in Grastopen Village Hall was **ample** or even **adequate?** I fancy not, sir: yet if it was **not** adequate, they failed in an essential duty reposing in them, and are therefore guilty of legal negligence.

As my friend established that the inherent weaknesses in the structure leading to its failure could not be estimated, it follows that a factor of safety **greater** than that employed in ordinary cases was called for; but can it be said that the factor of safety employed by the **defendants** was even the usual **five** or **four,** or even the minimum **three** times, the calculable strength? Sir, the evidence gives no support to that view. The defendants' own expert witness made it abundantly clear that the factor of safety was not even **twice** nor so much as **half** as much again as the calculable minimum, and, sir, I submit that in doing so, he definitely fixed culpable negligence upon the shoulders of the defendants.

It must have surprised you, sir, to listen to my friend's long list of circumstances **contributory** to the collapse, the absence of any one of which would have **prevented** the collapse: but if the stability of the building could have been secured by any one of six or eight precautions, **why,** in the name of wonder, did the defendants **not** take one or more of those precautions? Or **how,** having **failed** to take any one of them, can they claim to be **relieved** from a charge of negligence? It is clear, sir, that this third answer to the question, "Who was responsible?"—namely, that **no one** was responsible—which has been urged with such ingenuity by my friend—entirely and completely breaks down.

I now pass to the second possible answer, namely, that the **plaintiff** is responsible.

I shall not, sir, detain you by emphasizing the fatuousness of my friend's plea that my client, by a martial command, **ordered** American maple flooring. I will merely remind you of my client's **perfectly clear and obviously truthful** statement that he knows **nothing** about building operations; that he looked to his **architect** to advise him on **all** technical points; and that if his architect **had** told him that American maple was a tough and refractory wood—which is all the defendant claims to have told him—my client would not have known what was meant. Sir, may I also remind you that the defendant architect **admitted** in cross-examination that, at the interview with my client on December the seventh, he **definitely undertook** to lay down a satisfactory dancing floor of American maple. I need say nothing more, I fancy, sir, on that matter.

My friend has not gone so far as to tell you that the leaving in place of the blocks and wedges was **also** a martial order of my client, and I have only to submit, sir, that in undertaking to lay a satisfactory dancing floor of American maple the defendant architect clearly accepted responsibility for **all** precautions necessary to **secure** that result. It is unnecessary for me to say anything more on that matter, except to remind you that when I asked the defendant architect **why** he had not ordered the removal of the blocks and wedges, his answer was that he **overlooked** the matter as there were so **many things to think of.** In face of that admission, sir, my friend still asks you to decide that his client's omission to order the removal does **not** amount to negligence.

I now come to the gravamen of my friend's contention that the plaintiff is responsible, namely, his submission that the collapse was due to the wilful or negligent act of my client in promoting in the hall a **beastly, drunken orgy.** I am not going to contend that some who were present that night did not take alcoholic drink in excess of what the rector of the parish might think seemly; but the contention that two dozen bottles of whiskey distributed among three hundred and twenty persons could **alone** produce intoxication, or that if my client, conceivably, **intended** to promote intoxication he would have **limited** his gift to two dozen bottles, is so extravagant that I will make no further comment upon it, confident as I am, sir, that you will understand very well what the degree of alcoholic enlivenment that evening actually amounted to; **but,** sir, I do ask your attention to the submission of my friend that it was this alcoholic enlivenment of the dancers that caused the buckling of the floor.

First, sir, I will remind you that the defendants' own expert witness, when pressed by my friend to say that the collapse was the result of **violent** dancing, refused to do so, and substituted the word **energetic.** Now, sir, what is the nature of a "gallop"? It is a dance that can be danced in **no other way than energetically;** and this is so well understood that it is danced but **once** in an evening, and then **always** as a **concluding** dance, or **finale,** or **last fling** or **wind up,** of the entertainment. An ordinary gallop danced in the usual way at the close of the evening, as is usual, was sufficient, according to the defendants' own witness—a gentleman of firm discretion and exact phrases, as you, sir, observed—to account for the collapse. But if you had **not** heard this witness to the **fact,** in what way **could** the advanced degree of intoxication urged by my friend have **increased** the destructive effect of the dance? Obviously, sir, it would have had rather the effect of **diminishing** that destructive effect. Is a drunken person more **active,** more **nimble,** more **energetic,** more nicely precise in observing **rhythm,** than one who is sober? Assuredly he is **not;** he is **clumsy, slow-footed** and **blundering,** and would be incapable of imparting to the dance that energetic

rhythm which is characteristic of the gallop and which was necessary for the overthrow of the walls. If, sir, you are with me in this, I submit that I have established two points, **first,** that as energetic rhythm **did,** in fact, operate, **therefore** the dancers were **not** intoxicated; and **second,** that as they were **not** intoxicated, my client is entirely absolved from promoting a drunken orgy and—by my friend's own admission—is **not** accountable for the buckling of the floor—for the buckling is shown to have been the result of using the floor, as anyone who lays down a dancing floor knows it will be used.

But, my friend says, it was, particularly, the wilful or negligent act of my client's guests in dancing on the floor **after it had buckled** that brought about the collapse. It is not disputed, sir, that if the buckled floor had **not** been danced on, the hall would now be standing; but in **what way** can a charge of wilful or permissive negligence be shown to lie against my client? By reason, says my friend, of the native callousness or mischievousness of my client's guests. He says that my client negligently allowed irresponsible, drunken, agricultural rantypolls to knock the place down. Sir, I submit that that plea is completely answered by the reply my friend got in cross-examination from my witness, Mr. O'Hara : " Sure, how would we know the floor was not the way a spring dancing floor **would** be? " How, sir, **would** they know? **How** could they be **expected** to know? When the defendants undertook to design a hall for an agricultural village, suitable for dancing in, **who,** did they suppose, would dance there? Was it members of the Institute of Civil Engineers, lecturers on Statics and Dynamics and eminent King's Counsel; or was it to be Hodge, and Jack Pudding, and Tony Lumpkin? Sir, I submit that the evidence is clear that the dance which wrecked Grastopen Village Hall was a **usual** dance, danced in the **usual** way by dancers whom the hall was **specifically intended and designed to accommodate,** and that when my friend contends that the plaintiff is responsible for the collapse he has not a shred of evidence to support him.

I now, sir, come to that last of the four possible answers to the question, "Who was responsible?"—and which is first on my list—namely, that the **defendants,** jointly and severally, were responsible; but I shall not, sir, detain you long, for in showing that no **other** answer than this is possible I have already said all I can say without grave risk of wearying you by repeating myself. There are, however, one or two points of which I ask permission, sir, to remind you.

Both my friends spoke at some length of the relative responsibilities of the two defendants; but beyond wishing to associate myself with all that each of my friends said in **blaming**—and **rightly** blaming—the others' client, I have nothing to add, for my case is **this** : that the defendant **Toomer** was negligent in failing to give adequate **instructions** and in **seeing** that the hall was soundly and well built; and the defendant **Swillerton** was negligent in failing to build **soundly** and **well.** My friends' pains to show you, sir, that adequate instructions **were** given and that the work **was** soundly and well built have, I fancy, sir, been wasted; for both pleas are negatived by this **decisive fact**—that the **hall did incontinently fall down.**

It is true, sir, that a building-owner is estopped by the act of his duly qualified agent,—his architect—in directing the contractor, from the recovery of damages from the contractor for failure **consequent** on that direction; but he is **not** estopped from recovering damages against the architect for that consequent failure. This is laid down by Mr. Justice Erle in the case *Turner* v. *Garland and Christopher*, quoted by my friend. My friend's submission that the use, and leaving in place, of the wedges, was not a matter for which an architect is responsible, is discredited by the famous case of *Leicester Guardians* v. *Trollope*, to which my friend did **not** refer. This was a case, sir—may I remind you—in which the builder of a hospital had **left in place** the wooden pegs knocked into the ground and ranged at a uniform level to fix the thickness of the concrete foundation for receiving wood-block floors. **Years** after the building was completed, sir—when the period of the builder's liability for defects had long expired—dry rot, set up in these pegs, was found to have involved the whole of the floors and adjoining woodwork; and though a clerk of the works had been employed by the plaintiffs to supervise the work on the building-owner's behalf, the judge held that the architect was negligent in leaving such a matter to the clerk of works, and the plaintiffs got a verdict with heavy damages against the defendant architect. In the **present** case the architect recommended the use of a special material that went wrong, and for this he was guilty of **negligence,** because a professional man is **not** entitled to **speculate** at the risk of a building-owner; he also allowed certain wedges to be improperly left *in situ*, and in this **also** he was negligent. Sir, the responsibilities of an architect are definite and exacting—as all architects who suppose otherwise sooner or later have to learn, to their cost—and cannot, sir, I fancy, be answered by the plea, " I overlooked the matter; there were so many things to think of."

One thing more, sir, and I have done. My friend, Counsel for the defendant Swillerton, submitted to you that the architect had issued his certificate of completion; that the building was, in fact, completed, and that **therefore** the penalty clause of the contract had lapsed and become void at the time the building collapsed; but, sir, this is surely begging the question ! A building which falls down the first time it is used for a purpose it was designed to fulfil, has **not** been completed. Moreover, the contract had **not** lapsed, for the builder was still bound under contract to complete the building by making good defects; and **money** was to become due to him **in respect of** such completion. **If,** sir, it should seem to you that the act of the architect in certifying completion estops my client from benefiting by the application of the penalty clause, **then** I submit that the architect was negligent in certifying completion and that my client can claim from the defendant architect the amount which would have become due to my client under the penalty clause if the architect had **not** negligently certified completion.

As to the other items making up the sum claimed as damages in the particulars of claim, I content myself with calling your attention, sir, to the very modest sum in which my client assesses loss of enjoyment. That **loss,** sir, and the **annoyance, frustration, disappointment** and **humiliation** to a man situated as my client, is not to be adequately represented in **money,** and he has **not attempted** to so represent it. The other items are the agreed cost of reconstruction, and the actual sums—supported by receipts—paid to parties injured by the collapse.

And now, sir, one last word. I have **refrained** throughout this hearing from vexing your ears—as my friend must have vexed them—by abusive disparagement of the other side. I have **not,** sir—however much my friend may have provoked me to do so—sought **in the least** to discredit that good standing and those moral attainments of the defendants upon which subjects my friend found it necessary to his case to be so **vociferous.** I **agree** that the defendants may—for all I know—be citizens of good repute and men of high integrity; **but,** sir, citizens of good repute who are also men of high integrity are **not,** I fancy, for those reasons, exempt from the obligations which bind **less** exemplary subjects of His Majesty; and are **not,** I believe, entitled to remission of the law and to a tempered justice ! It is **true** that, in this land, a man is not to be denied justice because he is **poor;** but neither is a man to be denied justice because he is **rich.** The defendants, by their culpable negligence,

have done **serious injury** to my client, who asks no more, in compensation for that injury, than law and justice ordain to be his due; and he asks it **not only** for **himself,** but because he holds it to be his duty—as a person publicly conspicuous—to protect those humbler members of the community who are not able to protect **themselves** against the catastrophes in which the negligence or incompetence of architects and builders may involve them.

My friend, sir, found it necessary to bolster up his case by dragging in one of those wretched squabbles which are common in village life throughout the country.



The Court House, Stokesley, Yorkshire, of which measured drawings are reproduced on the facing page. The side door gives on to what was the magistrate's private house.

Mr. Pitfall: It was **you** yourself who dragged it in.

Mr. Chawlegger: I **bolted** the quarry, but it was my friend who **pursued** and **harried** it. I say no word against the reverend gentleman, the rector of Grastopen; but **who among us,** sir, sitting in the remote confines of this room, dare gauge the rights or wrongs of a petty wrangle involving those **prejudices, vanities, emulations** and **rivalries** which are the failings of all men, be they prelates or laymen?

Of my friend's insulting denunciations of my client I will say merely this—that he himself expressed just those vulgar prejudices and that ignorant public hostility which my client has to contend against in his daily goings out and comings in. His **crime**—in a neighbourhood where the "County" rules—is that he **made** his money instead of **inheriting** it, and **won** the position he occupies instead of being **born** to it. His **wealth** is the object of just that snobbish scorn which my friend exhibited to you; his **every attempt** to fill the place he has made for himself, by **open-handedness** and by activity in **public service** and **philanthropic enterprise,** is obstructed and discredited by just such unfair ascriptions of **mean, self-seeking** motives as you have heard from my friend's lips. It is characteristic of my friend that he even sneered at the fact that my client had served his King and Country in the Army Service Corps.

Mr. Pitfall: I did no more than **mention** the branch in which he served.

Mr. Chawlegger: But **unnecessarily,** and in a **contemptuous** association: everyone knows the gibe, A.S.C.—Army Safety Corps. Sir, Colonel Jago was drafted into the A.S.C. because—as an experienced business organizer—he was considered of greater use in that occupation than in another; and if he was not therein serving his country to the best of his powers, I should very much like to know **who,** in those days, **was.**

Mr. Arbitrator, my client asks no more than this—that he shall have such an award as he is in law and in justice **entitled** to have; and he leaves the matter in your hands, sir, with perfect confidence that each of the parties to this action will receive his deserts without regard to **wealth** or **station.**

After Mr. Chawlegger ended, the arbitrator continued writing for two or three minutes, while there was a gentle stir and gathering up of litter about the table. Pitfall's clerk stole from the room with a bag of papers; Jago whispered Chawlegger, who only gave him half an ear as he sorted out documents; Twistle briskly licked a foolscap envelope and addressed it; Chawlegger accepted a lozenge offered him by Gadd, and Pitfall closely consulted a pocket diary.

The laying down of his pen and the blotting of the sheet by the arbitrator drew attention. With a certain ceremony he then said: "Well, gentlemen, I will now proceed to my award." He made this announcement as a warning that if anyone had anything to say his last chance was now. As nobody made any move to speak, the arbitrator next said: "I will consider my award and notify its publication to all parties in due course."

The arbitrator then rose, and all present stood. Hand-shaking between Counsel and the arbitrator was the concluding formality. The arbitrator then left his chair and, on his way out, shook hands with Vivian Fanshawe, John Robert, and David Winkletop—each of whom attempted, in reciprocating the courtesy, to throw a barleycorn into his own side of the scales: Jago, by a stiff bow as though the hand he held had been the hand of his Sovereign; Swillerton, with an abrupt, manly cordiality; and Toomer like a spaniel yearning for biscuit but dreading kicks. After the arbitrator had left the room Counsel shook hands each with his own client, and in rather a careless way considering it was the last they would ever see of them; and Pitfall and Chawlegger then went off to the Temple in the same taxi, like blood-brothers.

"Well, what did you think of it all?" Bosson asked, as a theatrical manager might of his show, while he and Toomer walked out of the building.

"Well, I—I—I—I don't quite know," Toomer rumbled. After regaling on Twistle, sandwiched between Pitfall and Chawlegger, Toomer had a worse indigestion of the whole matter than ever before.

"I will let you know directly the award is published," said Bosson, irritably. "Good-day."

"When will it be published?"

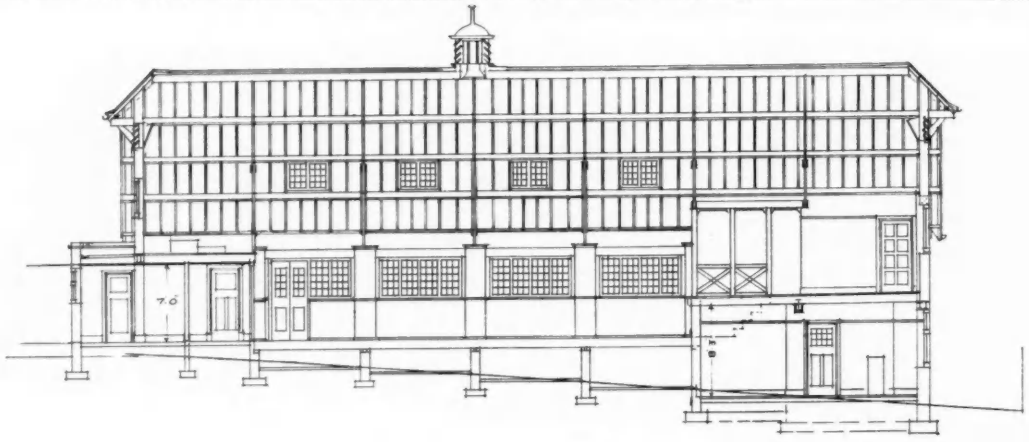
"Can't say."

"But what papers will it be published in?"

Bosson, who was signalling a taxi, waited for it, got in and drove off without replying.

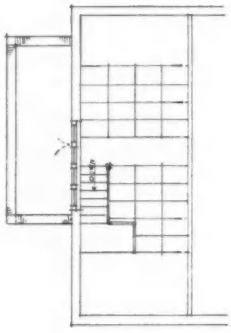
(NEXT WEEK—VIII: THE AWARD; AND AUTHOR'S COMMENTARY)

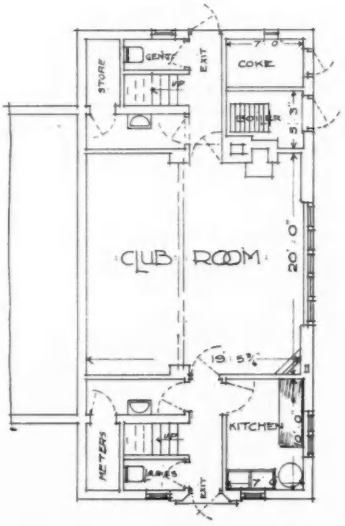
The Court House at Stokesley is built of brick, with stone quoins and plaster plinth, both painted, and has a slate roof, with hips and ridge of stone. The subtly bowed front to the Court room is treated rather after the manner of a shop front of the eighteenth century, and both in proportions and detail the design achieves a shapely dignity. A photograph showing the main street front and the bowed side appears on the facing page.



SECTION AB

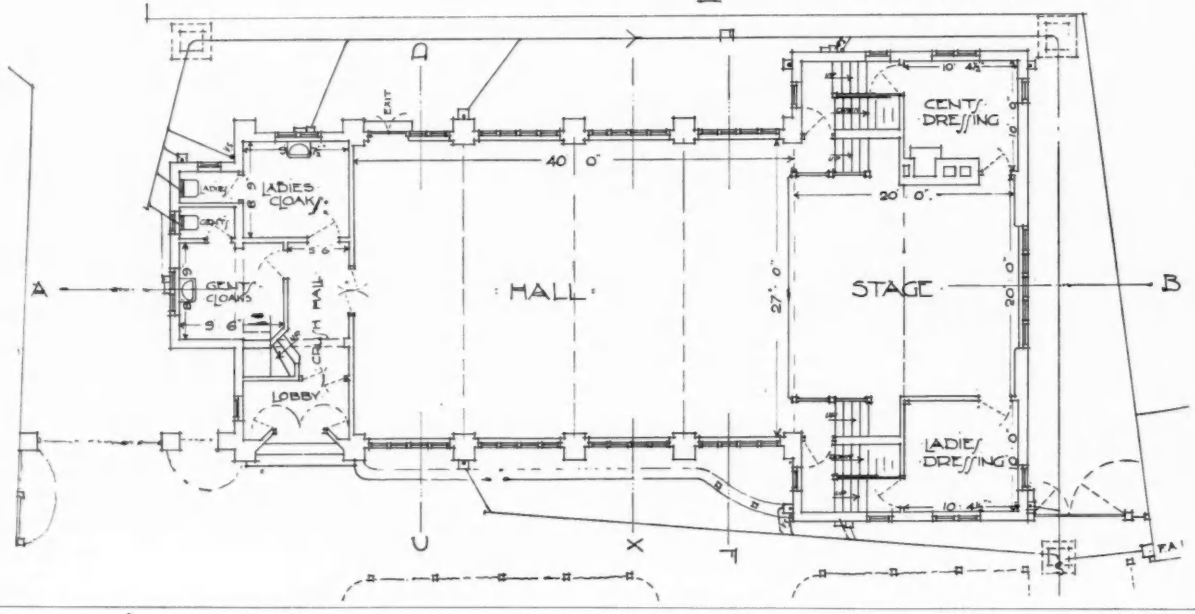
ALVECHURCH
VILLAGE
HALL,
Worcestershire





PLAN OF GALLERY

PLAN BELOW STAGE



[By Bloomer and Gough.

The architects' drawings of the ground-floor plan, with those at below stage and at gallery levels, and a longitudinal section. The hall was built on a site given to provide social amenities in the village, and has a floor, 40 ft. by 27 ft., in maple, for dancing. Two hundred people can be seated, with an additional forty in the gallery.



The exterior, showing the main front to Bears Hill. Designed in the style of a tithe barn, the base is built of Bromsgrove stone from a demolished railway bridge, the walling in King's Norton bricks, and the roof in smoked tiles.

ALVECHURCH VILLAGE HALL, WORCESTERSHIRE

DESIGNED BY BLOOMER AND GOUGH

THIS hall is the outcome of a competition limited to five local architects, £2,000 being the contract price in view. It was, however, not found possible to give the accommodation required within this limit. The winning architect's estimate was for £2,200, but this figure was considerably exceeded by the lowest tender. After certain economies, it was reduced to £2,412. Eventually King's Norton bricks were used, those that had been near the fire—i.e. blacks and greens—being chosen, mixed with reds, to give a mottled effect. The quoins to piers and window reveals are of Bidford sandstocks, while the base was built of stone from a demolished railway bridge, given, in fact, by the L.M.S. Railway. The roof is covered with smoky tiles, and metal casements, glazed with leaded lights, were employed throughout. The object being to provide a social centre, the hall has been made adaptable for many purposes. The stage is furnished with a system of head, foot and flood lights, and dressing-rooms for the two sexes are included in the facilities for dramatic performances.



The interior of the hall, looking towards the stage, which is fully equipped with foot, head and flood lights, for theatrical purposes. Behind are dressing-rooms; below is a club room, with kitchen adjoining.

MELLS PARK, SOMERSET

THERE are many delightful photographs in the February issue of *The Architectural Review* of Mells Park, Somerset, the residence of the Right Honourable Reginald McKenna. Mells Park, which was burnt down in 1917, faced south on to a gentle upward slope, and westward down a steep incline to a picturesque little lake of its own. It was a good-sized house, and surrounded a courtyard on three sides.

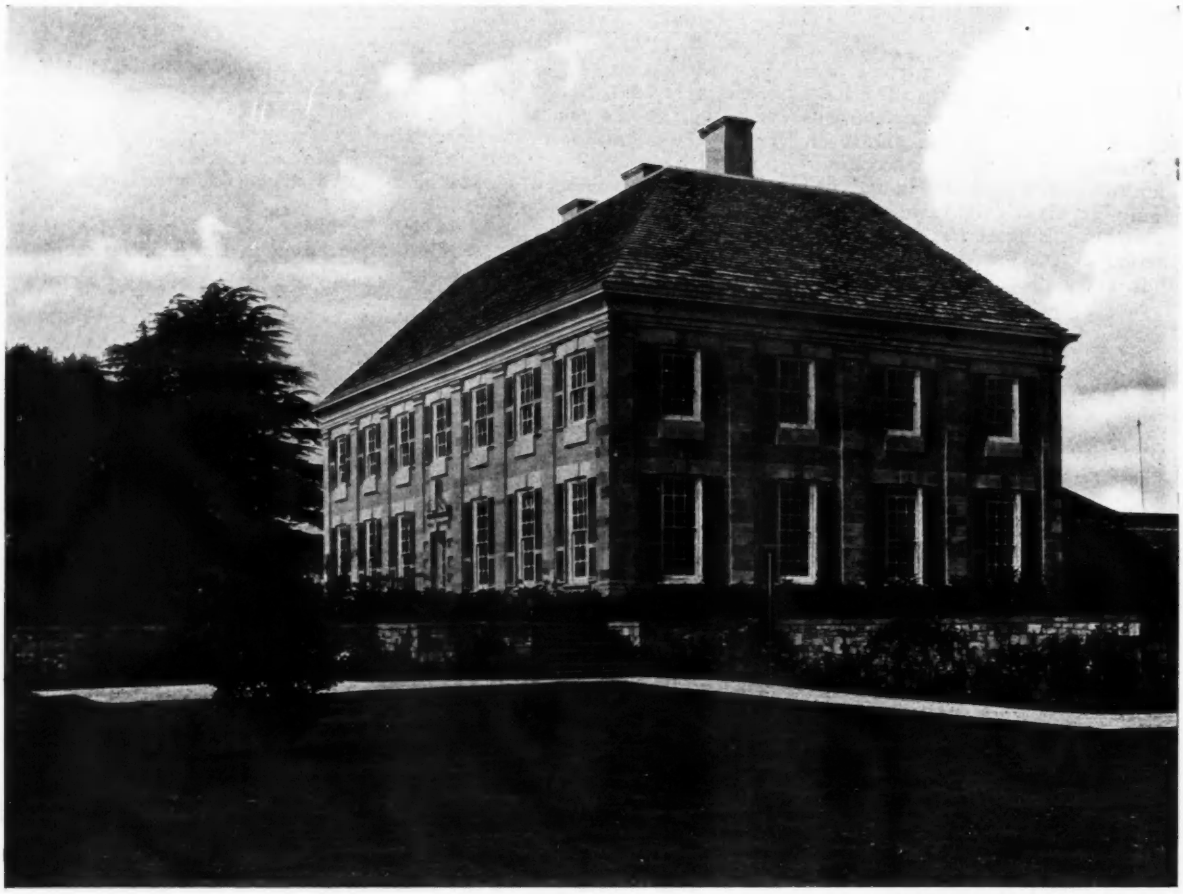
In 1924, Sir Edwin Lutyens began to rebuild it for Mr. Reginald McKenna. The whole colonnade of the courtyard was retained, but only two wings of the original house have been rebuilt. The main body of the building being to the south, and the servants' wing to the west, means that the courtyard is no longer central. The fall of the ground puts the first floor of the west wing on a level with the ground floor of the south, while the servants' ground floor gradually becomes a basement the farther south it goes.

Mr. Christopher Hobhouse, in an article on the building in the same issue, says :

At first sight the design of the front with its unbroken rows of windows, seven along and four across, seems to indicate a monotonous plan, divided into twenty-eight perfect squares. But it does not take long to discover that while the pilasters of the south front are only 8 ft. apart, those on the east and west are 9 ft. 2½ in. apart, so that the units of the plan are not squares but oblongs, thus giving a pleasing variety to the proportions of the rooms. These twenty-eight units are economically used. The library and drawing-room take up six apiece, the dining-room, morning-room and stairs four apiece; while four are left over for the pantry and hall.

The exterior of the house is open to little criticism. Apart from the dormer windows on the west, my only complaint is that the lintels of the windows contrast with the rest of the stone, both in size and texture. The north front compensates for a certain lack of beauty by a display of dazzling ingenuity.

Taken as a whole, the house presents a perfect blend of dignity and simplicity. Without its graceful pilasters, it would be deprived not only of its dignity, but also of apparent adequate support to the stone roof. The discrepancy I have already mentioned, in the distance apart of these pilasters, is carried out without any of those signs of apology or shame which so often spoil over-scrupulous work. The coved cornice gives just the feeling of homeliness which this Order lacks in its more orthodox form. As for the roof and chimneys, one can only envy their lavish, unerring proportions. Sir Edwin Lutyens is seen at his best in this sort of straightforward country house, in which classical ornament has not been stuck on like a coat of paint, but incorporated from the beginning as a governing factor of the design



[*From* The Architectural Review.

Mells Park, Somerset, from the south-east. Sir Edwin Lutyens, architect. The walls are built of Bath stone. For the facings and quoins old stone from the original building was re-used as far as possible, and the new stone supplied for the entrance doorway was obtained from the same quarry. The window shutters are stippled in myrtle green on a lighter ground. The coved cornice is of plaster with a wood moulded gutter above and a stone string below. The roof is covered with grey tiles.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

IN the House of Commons on February 12, Mr. P. Oliver moved a resolution viewing with regret the excessive burdens placed on the occupiers of new houses by the incidence of the present rating system, and by street-paving charges, and the detrimental effect of such burdens on future housing developments, and urging on the Government the consideration of proposals for the reduction of such burdens in connection with any future legislation dealing with the question of housing.

Referring particularly to road charges, Mr. Oliver gave an instance of one estate where nearly three years' rent was absorbed by such charges. These burdens were crushing development, and road making should become a communal charge. "Ribbon" development was taking place because there were no road authorities for arterial roads. They were taxing people who undertook "block" development, which was desirable, and not taxing people who undertook "ribbon" development, which was undesirable.

Mr. Greenwood, the Minister of Health, replying to these and other points raised in the debate, said that the problem of street-paving charges was one which ought to be the subject of some inquiry. It was probably true that local authorities were demanding roads which were in excess of requirements.

Already discussions had taken place between officers of his Department and representatives of the Institute of Municipal and County Engineers on the question of cost and the incidence of cost. He hoped that inquiry would be pursued. He had never defended the present rating system, which was hopelessly antiquated and out of touch with modern requirements. But the problem of rating was not one which they could deal with as a side line when they were dealing with the housing problem. He agreed with much that had been said as to the hardship of the incidence of taxation and street paving charges, but he asked the House not to pass the resolution because of its irrelevancy to the housing problem. Members, he hoped, would bear with patience what little delay there might be in the bringing in of the promised Bill.

Eventually, however, the resolution was agreed to.

Mr. Lansbury stated that the question of the erection of a new building to house departmental staffs on the Whitehall Gardens, Montagu House site, was still under consideration, but no decision had yet been taken on this proposal or on the proposal to vary the building line on the Thames Embankment. Until a decision had been reached on this question it was obviously impossible for him to state what departments could be housed in the building.

Sir John Power asked the Minister of Health if he could state the number of houses completed during each of the months, October, November, and December, 1929, and, for comparison, the corresponding figures for the same months of 1928.

Mr. Greenwood said that returns as to houses erected without State assistance were obtained half-yearly only, but the following statement showed the number of State-assisted houses completed during each of the months in question in England and Wales :

Month.	No. of State-assisted houses completed during the month under the		
	Housing, Town Planning, etc., Act, 1919.	Housing, etc., Act, 1923.	Housing (Financial Provisions) Act, 1924.
1928 :			
October	—	6,174	4,585
November	—	4,152	4,195
December	—	3,871	3,881
1929 :			
October	4	—	6,278
November	10	—	4,555
December	—	—	3,674

Mr. Greenwood informed Viscount Lymington that up to December 31 last, the latest date for which figures were available, assistance had been promised under the Housing (Rural Workers) Act in respect of 2,510 dwellings in England and Wales. Work had been finished on 1,669 of these, and was in progress on a further 650. Applications in respect of an additional 396 dwellings were then before the local authorities.

Mr. Greenwood informed Miss Lloyd George that the number of houses completed under the Housing, etc., Act, 1923, up to September 30, 1929, was 413,911 in England and 22,722 in Wales. The number completed under the Housing (Financial Provisions) Act, 1924, up to January 31, 1930, was 269,337 in England and 11,741 in Wales.

Sir Kingsley Wood asked the Minister of Health if he would state the average cost per superficial foot of non-parlour and parlour houses included in contracts let by or in direct labour schemes of local authorities in England and Wales during 1929.

Mr. Greenwood said that the figures were : for non-parlour houses, 8s. 11¾d., and for parlour houses 9s. 0¼d.

CORRESPONDENCE

A NORMAN SHAW BUILDING

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I rub my eyes and wonder if I am reading the signature correctly—"Baillie Scott." We all know Baillie Scott, the author of very numerous buildings, admirably toning with their surroundings, of a picturesqueness we have ourselves a little envied. Would there have been a Baillie Scott if there had not been a Norman Shaw, and if he had not had an earlier manner?

There is one passage in this letter (see last week's issue) of very grave inaccuracy—"a building of this kind which has nothing to recommend it but the name of its designer." This is simply rhetoric. Mr. Scott cannot know the building, or the 125 drawings in the Institute Library, mostly in Shaw's own hand, from which it was developed.

I challenge Mr. Scott to show any one point in any of these or in the completed building, which, considering the craftsmanship available in 1868, could have been done better.

This is not a question of ruining the aspect of a street; Castle Street, Farnham, can very well take care of itself. Without any improvement of its features, and with several worse buildings than Shaw's Bank, it would still be one of the most satisfactory streets in England.

Admitted, that Shaw's influence was good, the point is not which of his buildings he would have chosen as a memorial, but how to record development.

Shaw began in an offshoot of the Gothic revival, and was the principal influence in English domestic architecture for forty or more years; his work during that time shows a steady change from Gothic to Classic detail, and from irregular to formal planning. Therefore, in order to illustrate his life's work, several instances must be preserved. Of these I would choose : the Bank, Farnham; Pierrepoint, Fleete, in Devonshire; and No. 2 Queen's Gate, Kensington. If anyone knows a better series let them point it out.

It will be noticed that I have chosen none of Shaw's public works. Shaw lived at a period when our public works were as bad as they could be, and although his influence was beneficial, particularly in plan, it will, I believe, be for his influence on domestic work that Shaw will be remembered.

HAROLD FALKNER

SMOKE ABATEMENT

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The Report on Smoke Abatement prepared by a Committee of the R.I.B.A. is remarkable for the fact that

the Committee makes detailed reference to the effect of smoke upon one kind of building material only, viz., stone.

It is true that the report states that "sulphuric acid particularly corrodes or disintegrates practically all kinds of building materials," but it would certainly have been of more interest to architects and others if the Committee had pointed out that well-burnt clay products will successfully withstand the smoke-laden atmospheres of our great cities, as evidenced by the successful use of bricks, terra-cotta and faience on thousands of buildings which, after standing for many more years than the decayed stone buildings which the Committee deplores, show no signs of corrosion or disintegration.

H. HALLIDAY,
General Secretary, The National Federation of Clay Industries.

SOCIETIES AND INSTITUTIONS

TOWN PLANNING AND SOOT

SIR JOHN ROBERTSON, lecturing on "Town Planning" at Birmingham University, said that a town-plan enabled an authority to prevent overcrowding of dwellings on a site, to avoid the mixing of smoky factories with dwellings, and to establish a pleasant environment for the dwellings. They must not overlook the need that existed of an atmosphere free from soot. There was abundant evidence of the ill-health arising from soot-laden air. A minor disadvantage was the dirtiness it caused and the large amount of extra washing it entailed.

When the number of houses to the acre was strictly limited it was possible to give every dwelling a good circulation of air round it and an unrestricted amount of sunshine.

INSTITUTE OF LANDSCAPE ARCHITECTS

At the first public meeting of the Institute of Landscape Architects, held in the Royal Horticultural Hall on February 11, an address prepared by Mr. Thomas H. Mawson was read by his son, Mr. E. Prentice Mawson. The former is the first president of the Institute.

In the presidential address reference was made to the fact that too often in the past the profession of landscape architect had been the happy hunting-ground of amateurs and out-of-work members of all sorts of professions, trades, and cults, with results which might be seen everywhere throughout the length and breadth of the land. It had been glibly assumed that anyone possessed of a little native taste was capable of doing all that was necessary in laying out a park or garden of whatever extent and importance, and that, if any specialized training was necessary, it was confined to horticulture.

The Institute was set the very formidable task of practically re-creating a profession which, in this country, had become almost non-existent. There was a great work before them in the inculcation in their public, and especially their municipal bodies, of the obvious fact that good work in landscape architecture could not be done by just anybody, by, for instance, a borough engineer, whose whole training was in exact sciences and principally mathematics; or, on the other hand, by a working gardener whose knowledge was confined to the rearing and nurture of individual plants.

In this country it was the private landowner of the leisured art-loving classes who, so far, had been the patron of their profession, so that while they must go abroad for the finest examples of public work, practically all other nations, and not least the American nation, were generous in their praise of the English garden. While students in hundreds came over from America specially to study English gardens, they, in England, did not make the use they should of the opportunities provided at their very doors. The remedying of this state of things would provide one starting point for the activities of their new organization.

THE STANDARDIZATION OF ROAD SIGNS

On Friday last Mr. H. V. Lanchester, F.R.I.B.A., read a paper before the Town Planning Institute on "The Standardization of Road Signs," at Caxton Hall, Westminster, S.W.

Mr. Lanchester said that there were a few special signs to be found here and there to mark important routes, but there was not at present any systematic method generally applied to road crossings and junctions. The roads were also liberally sprinkled with warning signs, most of which would be superfluous if the method he proposed was adopted.

What was needed for the motorist, he said, was that the motorist should get the information as to his route, say, five seconds in advance, so that he knows what road he is going to take and has his mind free to take the turn or crossing, paying attention to this and the exigencies of other traffic. As the car would probably be covering 10 to 15 yards per second, the notifications should be placed 60 to 80 yards from the point in question, more or less in the position now occupied by the warning signs, which they would replace as being efficient substitutes for these.

ETCHING AND PRINT ENGRAVING

A meeting of the West Yorkshire Society of Architects was held at Leeds on February 13, under the presidency of Mr. G. H. Foggitt. An address was given by Mr. Walter M. Keesey on "Print Making and Collecting."

Mr. Kelsey made some brief remarks on the history of engraving as a means of pictorial representation, and explained the reasons for the adoption of particular methods, and also the various processes employed. Etching, he said, was an attractive art, appealing especially to architects, and very suitable for the rendering of surfaces and textures of building materials. The greatest etchers were fond of introducing buildings into their compositions, as, for example, Piranesi, and later, Alex Haigh and William Walcot.

ROMAN THEATRES AND AMPHITHEATRES

Sir Banister Fletcher, P.R.I.B.A., lecturing at the Central School of Arts and Crafts, described the theatres, amphitheatres and circuses as providing necessary amusement for the social life of Roman citizens.

SUBMERGED COMBUSTION

A paper on "Submerged Combustion" was read by Mr. C. Featherstone Hammond, the pioneer of this system, before a meeting of the Institute of Fuel on Wednesday last. Dr. F. A. Freeth, F.R.S., O.B.E., occupied the chair.

[*An illustrated article describing this system was published in our issue for July 31, 1929.*]

WELSH SCHOOL OF ARCHITECTURE

On Wednesday, February 12, a party of over 30 members of the School of Architecture Club, which is associated with the South Wales Institute of Architects (Central Branch) and the Welsh School of Architecture at the Cardiff Technical College, visited Gloucester and Cheltenham. At Gloucester they were able to inspect the cathedral, and they also visited the Sunningend works of Messrs. H. H. Martyn & Co., Ltd., at Cheltenham.

INTERNATIONAL CONGRESS OF ARCHITECTS, 1930

The twelfth International Congress of Architects will take place in Budapest between September 7–14, 1930. In connection with the congress an international exhibition of architectural plans and designs representative of modern architecture throughout the world will be arranged.

The executive committee entrusted with the preparations for the congress has, in order to enhance the importance of the congress and exhibition, awarded

prizes, consisting of one gold medal, two silver medals and three bronze medals, for the exhibition.

The committee has also decided to erect a statue to perpetuate the memory of Edmond Lechner, the Hungarian architect. This statue will be unveiled in Budapest next September.

READERS' QUERIES

COST OF BUILDING A FRENCH VILLA

R. writes: "*I should be grateful if you could obtain for me the following information:*

"*1: What is the average cost of building a good-class villa on the French Riviera, comprising, say, stuccoed walls, deal floors and joinery generally?*

"*2: What would be the best way for an English architect to set about such a contract—local firms or English firms? If the former, what is the customary practice in obtaining prices? Would one employ a French clerk of works?*"

[*The Editor invites readers with experience of building in France to reply to the above inquiry.*]

DAMP WALLS

H. G. writes: "*What are the ways of making and keeping an exterior brick wall dry? The wall is on the ground floor of an old house, and has no damp-proof course. The site is level and low-lying.*"

It is doubtful if there is any concrete under the floors. The proper method of dealing with it is, of course, to cut in a damp course and to put the concrete bed under the floors if necessary. I should think it probable that the floor timbers are rotten, and they should certainly be examined. DELTA

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, London, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

3082. Lundholm, J. E. Production of building-blocks. January 29.

SPECIFICATIONS PUBLISHED

324364. Asmussen, J. P. Machine for casting building-blocks and the like.

324452. Brown, H. E. Wood-block floorings.

PATENTS IN 1929

Although the year 1928 showed the highest figures in patents applied for at H.M. Patent Office in any one year, viz., 38,593, Messrs. Rayner & Co., of London, patent agents, inform us that the total for 1929 is 39,927. This total is especially satisfactory remembering the severe financial depression in the latter part of last year.

The extraordinary activity, however, shown by the Patent Office figures for 1929 clearly points to the onward trend of progress and enterprise in the world of inventions, the corresponding total for 1913, the last pre-war year, being only 30,102.

There does not appear to have been any startling or outstanding new invention last year, but more improvements and developments have been brought forward to improve the character and cheapen the production of manufactures.

LEICESTER ROYAL INFIRMARY

Following is a list of the general contractors and some of the sub-contractors for the Sir Edward Wood wing and the new operating theatre suite at the Leicester Royal Infirmary (pages 315–318):

Sir Edward Wood wing. General contractors, J. Chapman and Sons, Ltd. Sub-contractors: J. Ellis and Sons, terrazzo paving, concrete beam floors, reconstructed stonework and Hy-Rib metal lathings; Ellistown Colliery Co., tapped red wire-cut bricks; G. Potter and Sons, structural steelwork; Wm. Freer, Ltd., plumbing and glazing; Young, Austen and Young, Ltd., heating and hot-water supply; Gent, Hurley and Orringe, electrical installation; British Reinforced Concrete Eng. Co., reinforcement; Henry Hope and Sons, steel windows; Craven, Dunnill & Co., tiling; Doulton & Co., Shanks & Co., Twyfords, Ltd., and Ruffords, sanitary fittings; Doulton & Co., ward electric fires and faience surround; R. Wharton and Sons, chairs; James Slater & Co., servery and kitchen plant.

Operating theatres. General contractors, Bowles and Son. Clerk of works, J. C. Deacon. Stonemason, W. Brown. Sub-contractors: J. Ellis and Sons, floor and roof beams and terrazzo; the Vitrolite Co., Vitrolite lining to walls; Crittall Manufacturing Co., steel windows; Crewe and Sons, plastering; Wm. Freer, Ltd., plumbing; Doulton & Co. and Twyfords, Ltd., sanitary fittings; Leicester Asphalte Co., asphalte roofing; G. Potter and Sons, steelwork.

COMPETITION CALENDAR

February 28.—The Accrington Corporation invite architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor: Herbert J. Rowse, F.R.I.B.A. Premiums: £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars may be obtained from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before February 28.

March 10. The Council of the Metropolitan Borough of Greenwich invite architects to submit designs for a drinking fountain, which it is proposed to erect at Blackheath on a site facing the War Memorial at the junction of Maze Hill and Charlton Way. Premiums: £50, £20 and £10. Particulars of the competition and a copy of the site plan may be obtained from Frederick J. Simpson, Town Clerk, Town Hall, Greenwich Road, S.E. 10. Latest date for applications: March 10.

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated in 1930. The vase is intended as a centre-piece, and may be either a simple vessel decorated in relief and colour, or an architectural composition embodying ornamental adjuncts in the round. It should not exceed eighteen inches in height, though to this dimension not more than six inches may be added for a pedestal or plinth. Assessors: Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums: £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs: April 28.

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit, £1 1s. Latest date for submission of designs: June 14.

Mr. J. Ralph Edwards, A.R.I.B.A., of 7 Unity Street, College Green, Bristol, has won the Sir Charles Wakefield prize of 10 guineas and silver cup in the competition organized by Somerset Rural Community Council for garage designs.

THE "HEAVY" INDUSTRIES FAIR

The number of foreign visitors to the Heavy Section of the British Industries Fair, which opened in Birmingham on Monday last, will, it is stated, be largely in excess of those in any previous year.

The added inducement to visit this historic centre of England at a season when the countryside is at its best, proved the means of bringing to the Birmingham Section many newcomers from abroad who, notwithstanding the subsequent reversion to early Spring, have since improved their acquaintance, year by year, with this national display of heavy goods.

This year at least three thousand entirely new British products of interest, collectively, to every trade in the country, are to be seen in the Birmingham Section.

Following are some brief particulars of the principal exhibits:—

ADAMSEZ LTD., SCOTSWOOD-ON-TYNE AND LONDON

Fireclay sanitary goods: Basins, baths, country house sewage, coloured ware, fountains, flushing apparatus, hospital fittings, lavatories, sinks, urinals, water-closet sets, wash tubs and washing troughs.

ALLEN-LIVERSIDGE, LTD., LONDON

Oxy-acetylene welding, metal cutting and lead-burning equipment, electric arc and electric resistance (butt, seam and spot) welding equipment, air-acetylene tools consuming dissolved acetylene and atmospheric air for brazing, soldering, paint-burning, etc., acetylene generators, carbide, and all accessories.

BALDWIN, SON & CO., LTD., STOURPORT

This exhibit includes hinges and cast iron.

JOHN BOOTH & SONS, BOLTON

Steel and glass partitions for dividing warehouse,

factories and offices into compartments, fireproof doors and rolling shutters, electrically welded storage tanks, jacketed vessels, etc., steel forgings, solid steel columns, fire-escapes, structural steelwork, "Warren Girder" roofs, steel theatre balcony floors.

BRITISH THOMSON-HOUSTON CO., LTD., RUGBY

Electrical plant for every industrial requirement, including a large range of electric motors, control gear, switchgear, etc., and Mazda lamps.

THE BRITISH ELECTRICAL DEVELOPMENT ASSOCIATION, INC., LONDON

South Midland area. An inquiry bureau regarding the electrical industry generally.

THE BRITISH COMMERCIAL GAS ASSOCIATION, LONDON

This exhibit demonstrates some of the great branches of public utility made possible by the scientific treatment of coal in gas works. Also samples of by-products obtained from the scientific carbonization of coal are shown.

CELLACTITE AND BRITISH URALITE, LTD., LONDON

Urastone, the incorrodible flue pipe, is shown in all its useful forms, the new airing cupboard heater being a special feature. Cellactite—corrugated sheeting "which cannot corrode and does not break"—is also shown. Other exhibits include Asbestone fire surrounds, cooker bases, etc., and Uralite.

ELSAN MANUFACTURING CO., LONDON

This exhibit shows the "Elsan" chemical closets and Elsanol chemical sanitation for homes, buildings, and districts without public sewers or water-flush.

THE EDISON-SWAN ELECTRIC CO., LTD., LONDON

Royal "Ediswan" lamps, lighting equipment, domestic appliances and heating apparatus, cables, accumulators and batteries, refrigerators, radio valves and apparatus, and battery chargers, etc.

THE EXPANDED METAL COMPANY, LTD., LONDON

"Servarising" treatment of metal articles to protect them from oxidation (scaling) at high temperatures. The process is claimed to be suitable for heat treatment appliances, oil engine parts, and furnace fittings.

THOS. FIRTH AND SONS, LTD., SHEFFIELD

A wide range of products made from Firth stainless and "Staybrite" steels. Applications shown include polished sheets, tubes, wire, foil, sections, castings, forgings, fittings, utensils, etc. The range of finished articles made by users of Firth stainless steels cover the whole gamut of engineering, industrial and domestic applications.

SIDNEY FLAVEL & CO., LTD., LEAMINGTON SPA

The Flavel gas cooker in many sizes and finishes, with special features for ease of cleaning; fitted with thermostatic oven control, and designed throughout, it is claimed, for efficient and lasting service. Also the "Metro" coke fire, many designs of gas mantel registers and fires.

THE GENERAL ELECTRIC COMPANY, LTD., LONDON

A varied selection of products manufactured in one or another of the twenty-odd factories owned in this country. The operations of the G.E.C. cover, it is claimed, the entire field of electrical engineering from the equipment of the largest generating stations and power transmission systems to the smallest electrical accessories.

G. A. HARVEY & CO. (LONDON), LTD.

Perforated metals, pipe guards and grilles, woven wire, all meshes and gauges; sheet metal and plate work, steel piping and gutters, ventilators, chimneys, electric heater guards, ventilating panels, steel plate work, Harvey steel furniture, and ornamental radiator covers.

HENRY HOPE AND SONS, LTD., SMETHWICK, BIRMINGHAM

Windows in steel or bronze, standard steel windows and sashes, "Lok'd" bar factory sash for factories, warehouses, etc., patent roof glazing for railway stations, power houses, etc., hardware, locks, door and window furniture, nameplates, etc., and lead work.

HOSKINS AND SEWELL, LTD., BIRMINGHAM

Metal windows of every description, including casement windows and doors in steel and bronze, standard windows, factory sashes and tropical windows. Also examples of leaded glazing and antique fittings.

ARCHIBALD KENRICK AND SONS, LTD., WEST BROMWICH

Aluminium hollow-ware, baths (enamelled cast iron), brassfoundry (general), household ironmongery, kitchen utensils, laundry irons, ranges, and stoves (cast iron), wickless oil stoves, and hot brass die-pressings.

IMPERIAL CHEMICAL INDUSTRIES

The stand of the Imperial Chemical Industries is occupied by Messrs. Naylor Bros. (London), Ltd., Nobel Chemical Finishes, Ltd., both of Slough, Bucks, and Frederick Crane Chemical Co., Ltd., Birmingham. Every variety of finish for household, commercial and factory use is exhibited, including the following: Brushing "Belco" for handy home uses, "Fastain," the combined varnish and stain for all woodwork, ready mixed paint, "Nayrodec" water paint for walls, super-elastic gloss paint for high-class decorative work, varnishes, distempers, "Melanoid" bituminous paint, for protecting metals from rust, "Tectal" wood preservative, "Necol" plastic wood, and "Petrumite" imitation stone paint; "Cranco" cold brush lacquers, "Zapon" cellulose lacquers for all metals, "Enamelloid" cellulose blacks, matt, semi-bright and glossy, "Brassoline" pure shellac lacquers, "Cranco" wood finishes for furniture and all woodwork, "Cranco" spray enamels for application to all surfaces, celluloid varnishes, and frosting lacquers for electric lamp bulbs.

THE KLEINE PATENT FIRE-RESISTING FLOORING SYNDICATE, LTD., LONDON

Kleine patent fire-resisting floors. Over 2½ million square yards, it is claimed, have been built in the United Kingdom. "Duromit" surface floor is also shown.

THE LEEDS FIRECLAY CO., LTD., WORTLEY, LEEDS

Leeds fireclay faience, glazed bricks, sanitary and drainage fittings, fireplaces, "Lefco" garden ornaments, firebricks, and gas retorts.

MACINLOP, LTD., MANCHESTER

All modern applications of rubber to industry, including engineering, mining, shipbuilding, chemical, railway, building trades. Macinlop "High Speed," "Service" and "Forte" transmission belting, conveyor and elevator belting, Macinlop hose, rubber covered tanks, pipes, containers, chutes, screens for anti-corrosion by abrasive or chemical action, rubber floors, mechanical rubber goods, heavy service footwear, waterproof clothing, protective rubber gloves, etc., ebonite goods for chemical and electrical industries, and sponge rubber upholstery.

METRO-VICK SUPPLIES, LONDON

Modern domestic electric appliances, including washing machines, cookers, fires, automatic kettles, etc., electric light fittings, including panel fittings, complete range of wiring accessories in metal and Bakelite Met-Vick ray reflectors, flood lights and flood rays for shop and street lighting, electric fans, etc.

PARKER, WINDER AND ACHURCH, LTD., BIRMINGHAM

British made industrial oil burners, domestic oil burners, and oil furnaces.

PILKINGTON BROTHERS, LTD., ST. HELENS

British polished plate glass, sheet glass, wired glass, Georgian wire glass, figured roll glass, rolled and rough cast double rolled glass, and miscellaneous glass articles.

RADIATION, LTD., ASTON, BIRMINGHAM

"Regulo-controlled" gas cookers, "injector-ventilating" gas grates, "Regulo-controlled" gas radiators, gas-heated hot-water circulators, washing coppers, general apparatus.

RAINSFORD AND LYNES, LTD., BIRMINGHAM

An exhibit of fittings for the gas trade, including a display of main cocks, unions, swivels, tees, elbows, ball joints, etc., also special fittings for cooking stoves, gas fires, gas boilers, geysers, and a selection of lighting fittings, both plain and ornamental.

A. REYROLLE & CO., LTD., HEBBURN-ON-TYNE

Metalclad, oil-immersed circuit breakers for industrial and mining apparatus, air break switches in metal boxes, combined with various accessories, ventilated self-aligning fuses, domestic cooker control boards, electric traffic control signalling devices, electric domestic hot-water storage cylinders, industrial, immersion type, electric water heaters, electric irons and stands, plugs and sockets for mining, battery charging, industrial and domestic uses.

THE RUBEROID CO., LTD., LONDON

"Ruberoid," "Starex," and "Pluvex" roofings for every type of roof and building, claimed to be in use under all climatic conditions for over thirty years; "Ruberoid" strip slates in red or green for garages and all sports and pleasure buildings; "Ruberoid" and "Pluvex" pure bitumen dampcourses, supplied in all wall widths.

RUSTON AND HORNSBY, LTD., LINCOLN

Ruston horizontal and vertical oil engines provide, it is claimed, the cheapest power for factory drive and for generating electricity. Ruston No. 4 half-cubic yard full circle universal excavator, supplied with special equipment for converting to work as shovel, dragline, back-acting trencher, skimmer scoop, or grabbing crane, and petrol-paraffin engine drive.

SHAWS GLAZED BRICK CO., LTD., DARWEN, LANCS.

Showing the newest developments of Faience productions, including new "Della Robbia" ware, and innovations for architectural decoration, fireclay sanitary ware, glazed bricks and tiles, electrical porcelains, fireplace surrounds, acid-resisting ware.

THE SILICATE PAINT CO., LTD., LONDON

This stand is decorated with Duresco water paint, Silpaco flat wall paint and Silcolac hard gloss paint. Charlton zinc white paint and Silkas varnishes for every purpose are shown, together with other interesting specialities.

SUBMERGED COMBUSTION, LIMITED, LONDON

Typical commercial submerged combustion plant and apparatus as applied to central heating, metal melting, chemical concentration, the dyeing and cleaning industry, etc.; also proportioning valves and other associated equipment.

THE UNITED STEEL COMPANIES, LIMITED, SHEFFIELD

Plain and alloy steels, bars, billets for forgings, drop stampings, etc., case-hardening and free-cutting steels, drop stampings, motor and aero valve stampings, springs for road vehicles, cold rolled steel strip, etc.

HENRY WIGGIN & CO., LTD., BIRMINGHAM

This exhibit shows the applications of "Silveroid," a nickel-copper alloy containing 45 per cent. nickel with a brilliant silvery colour and possessing, it is claimed, remarkable resistance to tarnish. Electrical resistance wires and their applications for heaters are also exhibited, and a range of pure nickel anodes.

YORKSHIRE AMALGAMATED PRODUCTS, LTD., DONCASTER

This exhibit shows "Stairfoot" double pressed red engineering and facing bricks, "Askern" rustic facing bricks in multi and controlled colours, representing the charm of old English brickwork.

YOUNG, OSMOND AND YOUNG, LTD., LONDON AND HERTS.

Unity tubular electric heaters for heating schools, churches, cinemas, etc., Unity electric towel airers, tubular electric four-bar radiators, electric anti-condensation window heaters, linen cupboard heaters, car heaters, tubular heaters for traction work, thermostats to maintain constant air temperature.

THE ARCHITECTS' DIARY

WEDNESDAY, FEBRUARY 19

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. Cantor Lecture, "Alfred Stevens: Architect-Sculptor-Painter." By D. S. MacColl. **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Honan Night. "Modern Architecture of Sweden." By B. B. Lewis.

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Roman Architecture." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

JOINT GAS CONFERENCE, Birmingham. "Tests of Comparative Costs of Fuels for Domestic Purposes." By A. H. Barker, M.INST.C.E.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE SOCIETY OF ARCHITECTS. At Northampton. Annual Meeting of the Northampton-hire Committee.

BRITISH INDUSTRIES FAIR, London and Birmingham. Exhibition will be open until February 28. (10 a.m. till 10 p.m.).

THURSDAY, FEBRUARY 20

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate: "That under the present system of Competitions in England, the progress of Architecture is being retarded." Affirmative, J. G. Sidebottom. Negative, T. F. Firth. **7 p.m.**

SHEFFIELD UNIVERSITY. Last of a course of three lectures on "The Acoustics of Buildings." By M. H. Evans. (Lantern Illustrations.) **6 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "The Ancient Guilds and their Halls." By Allen B. Walker. (Lantern Illustrations.) **7.30 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Lecture Theatre. "Italian Furniture." By H. Clifford-Smith, F.S.A. **5.30 p.m.**

CAMERA CLUB, 17 John Street, Adelphi, W.C.2. Exhibition of German Publicity Photographs. To be opened by Sir William Crawford, K.B.E. (11 a.m. till 1 p.m., 2.30 p.m. till 6 p.m.) Until March 20. **3 p.m.**

FRIDAY, FEBRUARY 21

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Royal Observatory, Greenwich." By Sir Frank Dyson, Astronomer Royal. **5 p.m.**

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE, Gower Street, W.C.1. "The Infirmary of the Mediæval Monastery, with special reference to the Abbey of Westminster." By Professor Percy Flemming, F.R.C.S. (Lantern Illustrations.) **5.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. "Paper Insulated Power Cables." By S. H. Hart. **6.15 p.m.**

SATURDAY, FEBRUARY 22

Sunrise, 6.0 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Fourth of a Series of Six Non-Technical Lectures on Present-Day Architecture. "Decoration and Furnishing." By G. G. Wornum, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Foyle's New Bookshop, 121 Charing Cross Road, W.C.2. **3 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Students' visit to the Deptford West Power Station.

MONDAY, FEBRUARY 24

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

ARCHITECTURAL ASSOCIATION, 34 Bedford Square. W.C.1. "Designing for the Film." By Lawrence Irving. 8 p.m. Exhibition of Film Settings (until March 22). **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture II.) **8 p.m.**

TUESDAY, FEBRUARY 25

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to the Bishopsgate Institute, Bishopsgate, E.C.2. **3 p.m.**

KING'S COLLEGE, Strand, W.C.2. Department of Electrical Engineering. Last of a course of three lectures on Electrical Transmission by Overhead Lines. (3) "Typical Transmission Lines in use in Great Britain; Characteristic Features of Low, Medium and High Voltage Construction." By Charles W. Marshall, B.SC., M.I.E.E. 5.30 p.m. Faculty of Arts. Sixth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) 5.30 p.m. **5.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North-Eastern Centre. At the Hotel Metropole, King Street, Leeds. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." By L. C. Grant. **7 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. "The Development of Lyttelton Harbour, New Zealand." By Cyrus J. R. Williams, M.INST.C.E. "Tyne Commission Quay, North Shields." By Ralph F. Hindmarsh, M.INST.C.E. "Cochin Harbour Works." By Robert C. Bristow, M.INST.C.E. Lectures to be followed by a discussion. **6 p.m.**

WEDNESDAY, FEBRUARY 26

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. "Italian Art and the Italian Exhibition." By William G. Constable, M.A., F.S.A. Lady Austen Chamberlain, G.B.E., will preside. (Lantern Illustrations.) **8 p.m.**

THURSDAY, FEBRUARY 27

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Street, W.1. "Broadcasting by Electric Waves." By Captain P. P. Eckersley. **6 p.m.**

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Social Life and Art in France during the Eighteenth Century." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Ferro-Concrete Cooling Towers." By T. J. Grueritte. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Timber Architecture in Old Houses and Churches." By Philip M. Johnson, F.S.A., F.R.I.B.A. (Lantern Illustrations.) **7.30 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. At the Caxton Hall, Westminster, S.W.1. "The Training of Operators in the Welding and Cutting Industries." By J. Ryder. **7.45 p.m.**

FRIDAY, FEBRUARY 28

R.I.B.A., 9 Conduit Street, W.1. London Architecture Medal, 1929. Latest date for submission of nominations.

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. Ordinary Meeting. At the Chamber of Commerce Buildings, New Street, Birmingham, "Types of Movable Bridges." By J. D. Vaughan, M.SC., A.M.INST.C.E. **6.30 p.m.**

ACCRINGTON COMPETITION. Latest date for submission of designs for the New Police and Fire Stations.

SATURDAY, MARCH 1

Sunrise, 6.47 a.m. Sunset, 5.39 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, Manchester and District Branch. Visit to the Manchester Newspaper Works and Offices. (Time will be announced later.)

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to the Acton Technical Institute. Meet in Acton High Street, main entrance, at 2.30 p.m. **2.30 p.m.**

MONDAY, MARCH 3

R.I.B.A., 9 Conduit Street, W.1. General Meeting, "The Design of Modern Railway Stations in Europe and America." By Frank Pick. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2 Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture III.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, South Midland Centre. At the University, Edmund Street, Birmingham. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. Also, "The Heat Pump—An Economical Method of Producing Low-Grade Heat from Electricity." By T. G. N. Haldane, M.A. **7 p.m.**

BIRKBECK COLLEGE, Bream's Buildings, Fetter Lane, E.C.4. "The Isometric Diagram of the Construction of the Dome of St. Paul's Cathedral." By Professor Beresford Pite, M.A., A.R.C.A., F.R.I.B.A. Sir Frederick Kenyon, G.B.E., K.C.B., D.LIT., will preside. **5.30 p.m.**

TUESDAY, MARCH 4

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Seventh of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

WEDNESDAY, MARCH 5

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper by L.A.P.A. **8 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Ordinary Meeting. "The Ford Factory, Dagenham." By Major E. H. Heathcote, M.A.(CANTAB.), F.R.I.B.A., A.M.INST.C.E., A.M.I.MECH.E. **7 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. Discussion on "The Space Required for Central Station Equipment." **7 p.m.**

THURSDAY, MARCH 6

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting: Nomination of Officers. "Classic Forms and English Geology." By Hope Bagenal, D.C.M., A.R.I.B.A. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Plywood: Its Influence on Modern Furniture Design." By Percy A. Wells. (Lantern Illustrations.) **7.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual Dinner at the Florence Restaurant, Rupert Street, W.1. 7.15 for 7.30 p.m. **7.15 p.m.**

SATURDAY, MARCH 8

Sunrise, 6.32 a.m. Sunset, 5.51 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Old and New Architecture." By the Hon. Humphrey Pakington, A.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

MONDAY, MARCH 10

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Some District Heating Systems." By L. J. Fowler, B.A. Light Refreshments. **6.30 p.m.**

WEDNESDAY, MARCH 11

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Eighth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. **5.30 p.m.**

THURSDAY, MARCH 13

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate on "Is the Skyscraper Architecture?" Affirmative, D. B. Smith. Negative, G. L. Crowther. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Walnut and Mahogany Furniture from 1710 to 1750." By Herbert Cescinsky. **7.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Pyramid Building Problems: Manpower Organization in the Pyramid Age." By D. Davidson, F.R.S.A. **6.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Bellingham." By H. A. Humphreys, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **6 p.m.**

SATURDAY, MARCH 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Messrs. Gamage's New Premises, near Marble Arch. Meet at entrance in North Row. **2.30 p.m.**

MONDAY, MARCH 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting Presentation of the Royal Gold Medal. **8.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "High Tension Sub-station Control Gear." To be opened by A. F. Harmer. **7 p.m.**

TUESDAY, MARCH 18

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts, Last of a course of nine public lectures on "Italian Paintings." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY. Paper on "The Lighting of a Large Liner." Light Refreshments at 6.30 p.m. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Eastern Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Voltage Control of Large Alternators." By H. W. Taylor. **7 p.m.**

WEDNESDAY, MARCH 19

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Design in Town Planning." By Dr. Raymond Unwin, F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Ordinary Meeting. "The Portrait in Later Monumental Sculpture." By K. B. ESDAILE (Mrs.). **8 p.m.**

THURSDAY, MARCH 20

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. Election of Officers. "Mainly About Germany." By Howard Robertson, F.R.I.B.A., S.A.D.G. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.C.2. "London in the Middle Ages." By D. Martin Roberts, M.A. (Lantern Illustrations.) **7.30 p.m.**

FRIDAY, MARCH 21

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Annual Meeting at the Royal Institute Galleries, Piccadilly, W.1.

SATURDAY, MARCH 22

Sunrise, 6 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Houses at Home and Abroad." By Oswald P. Milne, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Post Office (London) Railway, Mount Pleasant N.W. **4 p.m.**

MONDAY, MARCH 24

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Style in Sculpture." By Eric Gill. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Bellingham." By H. A. Humphreys, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

TUESDAY, MARCH 25

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Dominions and Colonies Meeting. "The Work of the British Association in Relation to the Empire." By O. J. R. Howarth, O.B.E., M.A. **4.30 p.m.**

WEDNESDAY, MARCH 26

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Architecture of To-day and To-morrow." By Howard Robertson, M.C., F.R.I.B.A., S.A.D.G. **8 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Nature and Modern Design." By Professor R. V. Gleadowe. (Lantern Illustrations.) **7 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The L.C.C. is to reconstruct and enlarge the BATTERSEA fire station at a cost of £26,000.

Plans passed at CATFORD: Shops, Bromley Road, for Mr. Samuel S. Yeo; twelve houses, Callendar Road, for Mr. A. E. Thomas; eighty-two houses, Selworthy and Winsford Roads, for Messrs. Walter Hall and Sons; seven houses, Chudleigh Road, for Messrs. J. W. Heath and Sons; four houses, Bournville Road, for Mr. George Tryhorn.

The Office of Works is to erect a telephone exchange in CLAPHAM PARK.

Mr. F. Betts is to develop the Oaklands estate at COULSDON.

The L.C.C. is to erect nurses' accommodation at Cane Hill Mental Institution, COULSDON, at a cost of £29 000.

Plans passed by the COULSDON U.D.C.: Dental workshop, 72 Brighton Road, for Mr. H. J. Askew; two houses, Marlpit Lane, for Mr. H. C. Dodrell; three houses, Fairdene Road, for Messrs. Walter Cottage, Ltd.; four shops, Godstone Road, Whyteleafe, for Messrs. E. O'Sullivan, Ltd.; house, Coulsdon Road, for Mr. H. Lund; house, Caterham Drive, for Mr. S. A. Older; bungalow, Caterham Drive, for Mr. C. Hierons.

The DAGENHAM U.D.C. is to construct an open-air swimming bath and a paddling pool in Valence Park.

Plans passed at ELTHAM: Five houses, Gerda Road, for Messrs. J. G. and W. F. Francombe; five houses, Blanmerle Road, for Mr. Frederick H. Jones; twelve houses, Sidcup Grove, for Messrs. W. R. Hindmarsh & Co.; twelve houses, Eltham Hill, for Mr. W. E. Wright; three houses, Blanmerle Road, for Mr. R. Kevan; eighteen houses, Thaxted Road, for Messrs. Eaglen Bros.; seventy-six houses, Cambridge estate, New Eltham, for Messrs. W. R. Hindmarsh & Co.; offices, shop, etc., High Street, Elm Terrace and Messeter Place, for Mr. George S. N. Stone; ninety-eight houses, Montbell Road, for Messrs. Eley and Allen; twelve houses, Glenlyon Road, for Mr. Robert Kevan; twenty-eight houses, Greenvale Road, for Messrs. Fretho, Ltd.; sports pavilion, New Eltham, for Messrs. Lever Bros. Ltd.

Plans passed by the EAST HAM Corporation: Fifty-seven houses, Nelson Street, Sessex Road and Market Street, for Mr. C. Griffiths; alterations, 50 High Street, for Mr. E. Cannell, F.R.I.B.A.; three houses, Dersingham Avenue, for Mr. A. R. Upsdale, F.S.I.; house, Burges Road, for Mr. P. P. Wernham; bakehouse, rear 721 Romford Road, for Mr. E. Meredith, F.R.I.B.A.; five houses, Bath Road, for Mr. W. Grover; extension to check office, St. Nicholas, Whitta Road, for London Co-operative Society, Ltd.; two houses, Third Avenue, for Mr. G. Cleare; two houses, St. Winefride's Avenue, for Mr. J. Frankeiss; house, Barking Road, for Mr. C. Warwick; thirteen garages, adjoining Altmore Arms, Altmore Avenue, for Messrs. Swan Bros.

The HAMMERSMITH B.C. is to erect another block of dwellings on the southern improvement area at a cost of £33,500.

Plans passed at HONOR OAK: Eighteen houses, Boveney Road, for Messrs. William Wilmot, Ltd.; laboratory, Honor Oak Road, for Burmah Oil Co., Ltd.

The LEWISHAM B.C. has obtained sanction to borrow £8,419, for the provision of additional slipper baths at Ladywell and Bell Green, and a filtration plant at the open-air bath.

Plans passed by the LEWISHAM B.C.: Twenty houses, Daneby Road, for Mr. A. E. Thomas; 102 houses, Baring Road, Lee, for Messrs. George Lansdown and Brown; house, Weigal Road, for Messrs. A. Shore & Co.; eleven houses, Newquay Road, for Mr. T. A. Boughton; nine and seven houses, Chudleigh Road, for Mr. J. W. Heath and Sons; garages, Morley Road, for Messrs. Thos. H. Sawyer and Sons; house, Love Lane, for Messrs. A. Keen & Co.

The L.C.C. Education Committee has prepared a programme for the improvement of old schools and the erection of new premises during the next twelve months, at a cost of £288,000.

The L.C.C. Education Committee is to erect a central school for 400 boys and one for 400 girls at PECKHAM.

Plans passed at PURLEY: House, Copse Hill, for Mr. J. G. Cooper; house, Verulam Avenue, for Woodcote Grove Estate, Ltd.; three houses, Hartley Down, for Mr. F. A. Freeman; four shops and six flats, High Street, for Mr. J. P. Oldaker; house, Oakwood Avenue, for Mr. E. Shoemack; four houses, Northwood Avenue, for Mr. T. A. Parker; builder's office and flats, Brighton Road, for Messrs. C. H. Gibson, Ltd.

Plans passed at SANDERSTEAD: Six houses, Briton Crescent, and three houses, Downsway, for Mr. H. P. Hawkes; house, Mitchley Avenue, for Mitchley Wood Estate, Ltd.; house, West Hill, for Mr. A. N. Dawson; two houses, Farley Road, for Messrs. Costain and Sons, Ltd.; extensions, Selsdon Park Hotel, for Mr. A. D. Sanderson.

The managers of the St. Mary's School, SOUTHWARK, have prepared plans for remodelling the whole building.

SOUTHERN COUNTIES

Plans passed by the DARTFORD U.D.C.: Twenty houses, Dartford Road, and sixteen houses, Devonshire Avenue, for Mr. W. J. Brise; four houses, Shepherd's Lane, for Mr. P. E. Shephard; steel paper-store, London Paper Mills, for the London Paper Mills Co., Ltd.; two houses, Carrington Road, for Mr. W. R. Mackney.

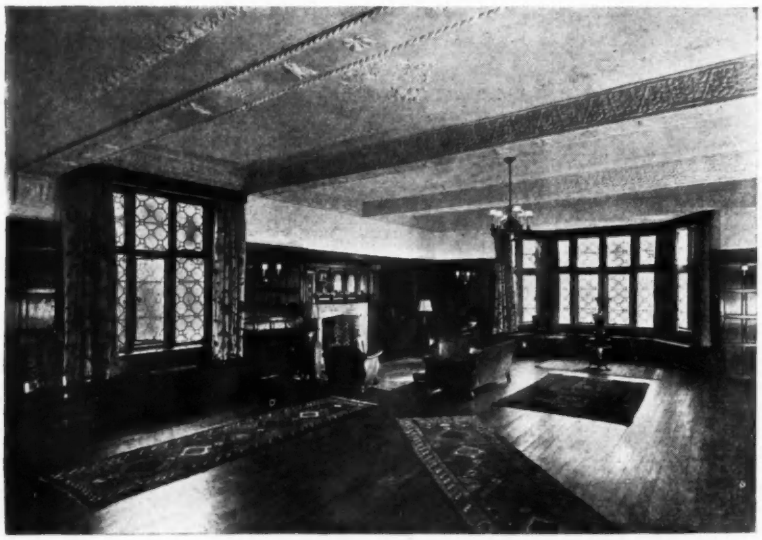
The PLYMOUTH Education Committee has approved plans for the extension of the public school at an estimated cost of £24,603.

The PLYMOUTH Education Committee has approved the sketch plans for the new education offices to be erected at a cost of £16,000. Tenders are to be invited for the work.

The PLYMOUTH Corporation recommends proceeding with the second part of the scheme for the layout of the central park, at a cost of £26,500.

Plans passed by the PLYMOUTH Corporation: Bungalow, Tavistock Road, Hartley, for Mr. J. W. Spencer; house, Vann Grove, for Mr. R. T. Hortop; bungalow, Berrow Park Road, for Mr. A. Manning; six houses, Stangray Avenue, for Mr. T. Box; two houses, North Down Road, for Mr. E. P. L. Gardiner; house, Pasley Street, for Mr. C. Pollard; showroom, 74 Cobourg Street, for Mr. J. Sweet; alterations, 4 Courtenay Street, for Plymouth Co-operative Society; extension of Browning Road to Wolseley Road, for Lord St. Levan; alterations to shop, Market Place, for Millbay Laundry Co.; layout of Pounds Estate, Peverell, for Messrs. Shellabear & Co.; reconstruction of tenement, 130 Union Street, Stonehouse, for Mr. J. Shopland.

Plans passed at POOLE: Motor workshop, Blandford Road, for Mr. G. Best; dwelling-house, Harbour Hill Road, for Mr. F. W. Spratley; six dwelling-houses, Albert Avenue, for Messrs. Crabb and Crabb; dwelling-house, Sunnyside Road, for Mr. P. J. Pooss; dwelling-house, Harbour Hill Road, for Messrs. W. G. Crane and Son; dwelling-house, Castledene Road, for Mr. H. Sadler; dwelling-house, Dorchester Road, for Mr. C. R. Symonds; dwelling-house and garage, Sandecotes Road, and dwelling-house and garage, Wimborne Avenue, for Mr. T. E. Grimes; dwelling-house, Ringwood Road, for Mr. A. G. Dacombe; alterations and additions, 180, 182 and 184 High Street, for Mr. H. W. Holder; garage, "Hermitage View," Ringwood Road, for Mr. S. C. Rowden; extension to workshop Pottery Road, for Mr. E. W. Kingsbury; addition to dwelling-house, Harbour Hill Road, for Miss M. P. Drewitt; addition to dwelling-house, Harbour Hill Road, for Mr. H. Hannam; addition to dwelling-house, Harbour Hill Road, for Mr. F. Coulton; garage, Anthony's Avenue, for Mr. E. de Wilde Holding; garage, "Hopefield," corner Sandbanks Road and Orchard Avenue, for Mr. R. J. Hope; garage, "Brockfield," Brixey Road, and garage, Pine Avenue, for Mr. S. G. Ward; two garages, Ringwood Road, for Mr. A. G. Dacombe; extension, St. Osmund's parish hall, St. Osmund's Road, for Mr. E. M. Wilkin; open store and w.c. addition to existing premises, Lucas Road, for Mr. H. Lintott; addition to dwelling-house, Frankland Crescent, for Mr. B. C. Short; addition to dwelling-house, "Cranleigh," Palmerston Road, for Mr. C. Humber; garage, two shops, workshop and stores, Ringwood Road, for Mr. W. C. Millard; dwelling-house, off Hunt Road, for Messrs. Corbin and Clark; alterations and additions, 224–226 High Street, Longfleet, for Messrs. Bromby Bros.; dwelling-house and garage, corner Buccleuch and Dalkeith Roads, for Messrs. S. Whitelock & Co.; dwelling-house and garage, Links Road, for Mr. E. F. Knight; dwelling-house, Hennings Park Road, for Mr. V. C. Head; dwelling-house, Enfield Road, for Messrs. L. J. Newell and Sons; dwelling-house, Frankland Crescent, for Messrs. Jackson and Greenen; garage, rear "Darnetall," King's Avenue, and dwelling-house and garage, Elms Avenue, for Mr. R. J. Bishop; two dwelling-houses, Alder Road, for Mrs. L. Smith; dwelling-house and garage, Sandbourne Road, Branksome Dene, for Mr. W. R. Gleave; two dwelling-houses, Hennings Park Road, for Mr. O. R. Mulley; dwelling-house, Harbour Hill Road, for Mrs. G. H. E. Duke; dwelling-house, Houlton Road, for Mr. A. J. Dacombe; alteration to three shops with dwelling-houses over, Fernside Road, for Mr. L. Preston; dwelling-house, Livingstone Road, dwelling-house, Victoria Road, and dwelling-house, off Livingstone Road, for Mr. M. J. Lawford; dwelling-house, Park Lake Road, for Mr. H. O. Stevens; dwelling-house and garage, corner Banks Road and Brownsea Road, alterations and additions to house, "Sandhills," Banks Road, for Rumsby and Rodd; garage, "Cobalt," Brownsea View Road, for Mr. T. H. Williams; addition to store, rear 303 Ashley Road, for Mr. E. W. Kingsbury and Sons; dwelling-house, Albert Avenue, for Messrs. Crabb and Crabb; two dwelling-houses, Dorchester Road, for Mr. H. J. Allen; dwelling-house and garage, Glenair Avenue, for Messrs. Corbin and Clark; dwelling-house, Harbour Hill Road, and addition to dwelling-house, Albert Crescent, for Mr. J. Jagger; proposed road, off Links Road, Canford Cliffs, for Messrs. Maggs and Maggs; additions Sandbanks hotel, Shore and Banks Road, for Mr. D. F. Hilliar; alterations and additions, 180–184 High



Billiard and dance room, "Tapton Holt," Manchester Road, Sheffield. Designed by S. Elden Minns. The room is 38 ft. long and 25 ft. wide. A large portion of the panelling is genuine old oak taken from an old hall near Newark. The ceiling beams and frieze were executed in fibrous plaster. Radiators are situated behind the oak spindle grilles under the windows. For plan of ground floor extension, see page 335.

Street, Longfleet, for Mr. H. W. Holder; dwelling-house, Sunnyside Road, for P. J. Pooss; alterations to shop premises, corner High Street and Towngate Street, for Mr. A. N. Patterson; dwelling-house, Houlton Road, for Messrs. W. G. Crane and Son; eight dwelling-houses, Norman Avenue, for Mr. T. Ventress; proposed road, off De Redvers Road, for Mr. T. E. Grimes; pair semi-detached dwelling-houses, Binnie Road, for Messrs. Philpotts and Manners; conversion of two detached dwelling-houses into two shops, 129 and 131 Ashley Road, for Messrs. W. Mabey and Sons; workshop, Old Orchard, for Mr. E. C. Tilsed; garage, Alder Road, for Mr. F. Ridgby; addition to house, Albert Crescent, for Mr. F. Bunn; garage, Fernside Road, for Messrs. Bromby Bros.; garage, Alder Road, for Mr. A. Cohen; garage, 22 Hermitage Road, for Mr. W. Baker; addition to dwelling-house, "Heath View," Rossmore Road, for Mr. E. Britton; garage, 19 Motcombe Road, for the Rev. G. Peterson; garage, Lake Road, for Mr. A. C. Short.

Plans passed by the PORTSMOUTH Corporation: Public-house, Southampton Road, Paulsgrove, for Messrs. Longs (Southsea), Ltd.; seven houses, Havant Road, Cosham, for Mr. E. W. Payne; laundry and boiler-house, Vicars Row and Frederick Street, for the governors of the Royal Portsmouth Hospital; offices and workshops, 16–18 Flathouse Road, for Portsmouth Island Mutual Co-operative Society, Ltd.; house and shop, High Street, Cosham, for Mr. A. A. Carter; ten houses, Crofton Road, North End, for Mr. W. Ford; additions, 201–207 Lake Road, for Messrs. J. Lay & Co.; billiard-room, 41 Kingston Crescent, for Mr. S. C. Allsford; shops, Rugby Road, and business premises, Rugby Road, for Messrs. Roy Corke & Co., Ltd.; queue room, Plaza Cinema, Bradford Road, for Mr. F. J. Spickernell; store, Cobden Avenue, for Portsmouth and Brighton United Breweries, Ltd.; extension of showroom, 27–28 Landport Terrace, for Southsea Engineering Co., Ltd.; alterations and additions, "The Scala," Elm Grove, for Mr. M. Berney; licensed premises, Maurice Road and Shirley Avenue, for Portsmouth and Brighton United Breweries, Ltd.; twenty-three houses, Langstone Road, for Messrs. McCarthy Bros.; four houses, Birby Road, for Mr. H. Westbrook; additions, Binstead Road Mission, Binstead Road, for the Parochial Church Council.

SOUTH-WESTERN COUNTIES

The BRISTOL Corporation is to erect fourteen houses at Shirehampton, forty-four at Sea Mills and 304 at Bedminster, at an estimated cost of £146,000. Tenders have been invited.

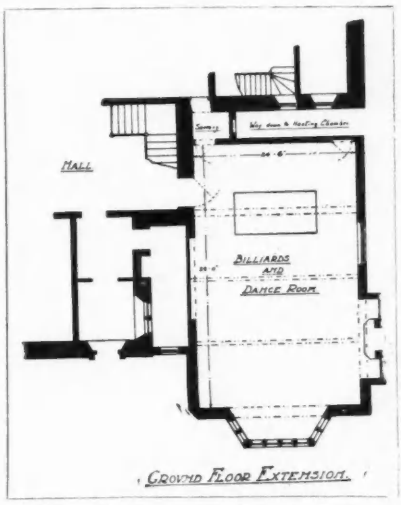
The Great Western Railway and the London, Midland and Scottish Railway Companies are seeking powers at BRISTOL for (1) a widening on both sides of the bridges carrying the joint company's railway over Cattle Market Road and the River Avon (New Cut); (2) a widening on the south-eastern side of the bridge carrying the joint railway over the Floating Harbour; (3) a widening on the south-eastern side of the bridges carrying the company's Bristol and Exeter Railway over St. Luke's Road and Sheene Road, Bedminster; (4) a lengthening at both ends of the bridge carrying Bath Road over the railway; (5) a lengthening at the south-eastern end of the bridges carrying Parson Street and Bedminster Down Road respectively over the railway; and (6) a widening of the bridges carrying the joint railway over Gas Lane and Avon Street.

The TORQUAY Corporation is to construct a sea wall at a cost of £9,500 at Meadfoot, where a landslide recently occurred.

Plans passed by the TORQUAY Corporation: Alterations and additions, Livermead House Hotel, Torbay Road, for the Livermead House Hotel, Ltd.; four houses, Westhill Road, for Mr. F. Maule; shop fronts, 7, 9, 11 and 13 Union Street, for Messrs. Mogridge & Co.; two houses, Avenue Road, for Mr. P. D. Cavanna; annexe, "Trelawney," Higher Erith Road, for Mr. E. Poole; alterations and additions, Palm Court Hotel, Abbey Crescent, Torbay Road, for Mr. W. Purkis; alterations and additions, Links Hotel, Fore Street, St. Marychurch, for Links Hotel, Ltd.; alterations, Royal Standard Hotel, Hele, for the Plymouth Breweries, Ltd.; two houses, Meyrick Road, for Mr. J. H. Tearle; house, Hennapyn Road, Livermead, for Mr. S. Hawkins; five houses, Leys Road, Chelston, for the Chelston Building Co.; bungalow, Devon Rosery Estate, Old Woods Hill, for Mr. E. H. Palmer; two houses, Windsor Road, for Mr. March.

EASTERN COUNTIES

Plans passed by the COLCHESTER Corporation: Additions and alterations, 17 St. Botolph's Street, for Messrs. Duncan Clark and Beckett; alterations, 48–49 High Street, for Mr. Harry Wilson, for Messrs. Montague Burton, Ltd.; alterations to shop, High Street, for Messrs. Duncan Clark and Beckett; house, Gladwin Road, for Messrs. Grimsey Bros.; conversion of premises formerly St. James's Orphanage, into three houses, East Bay, for Mr. E. Mower; bungalow, Greenstead Road, for Messrs. W. J. Vaughan and Sons; house, Nelson Road, for Mr. C. Brown; house, Layer Road, for Mr. A. J. Millbank; additions to mission hall, Canterbury Road, for the Churchwardens of St. Stephen's Church; house, St. Helena Road, for Mr. A. Hurd.



Plan of the ground floor extension, "Tapton Holt," Manchester Road, Sheffield. Designed by S. Elden Minns. On the first floor are three bedrooms, bathroom, and lavatory accommodation.

MIDLAND COUNTIES

The DUDLEY Corporation is considering the purchase of land for the extension of the art gallery.

The Leicestershire C.C. is to obtain a site at MARKET HARBOROUGH for the erection of a senior school.

The MARKET HARBOROUGH U.D.C. is to purchase land for the erection of fifty houses.

Plans passed by the MARKET HARBOROUGH U.D.C.: Shops and club premises, The Square, for the Working Men's Club, Ltd.; additions to shop, Northampton Road, for Messrs. H. Monk and Sons; new pavilion, recreation ground, for Messrs. R. and W. H. Symington & Co., Ltd.

The governors of the SOLIHULL (Warwickshire) School have passed plans for the first instalment of the scheme for new buildings, at a cost of £20,800. The complete scheme will cost £40,000.

The governors of King Edward VI Grammar School, STOURBRIDGE, are to provide a new assembly hall and gymnasium at an estimated cost of £12,000.

NORTHERN COUNTIES

The BOLTON Corporation has passed plans on behalf of Lady Beaumont for the development of new estates.

Sir William Hulton, Bart., is to proceed with the layout of land at Hulton Lane, BOLTON.

The BRADFORD Corporation is seeking sanction to borrow £100,000 for the purpose of acquiring premises in the central area of the city.

Plans passed by the CHESTERFIELD Corporation: Four cottages, James Street, Stonegravels, for Mr. A. Clarke; additions, off Canal Wharf and Wharf Lane, for the British Petroleum Co., Ltd.; house, Holland Road, Old Whittington, for Mrs. E. Holmes; two houses, Rhodes Avenue, for Mr. A. Needham; alterations and additions, 125–149, High Street, New Whittington, for Mr. Dolman; extension to business premises, New Beetwell Street, for Messrs. Broomhead Bros.; two houses, Brocklehurst Piece, Old Road, for Messrs. W. and E. Dolphin; additions, Burlington Street, for Messrs. Greville and Stuart.

The managers of Hollinshead School, CHORLEY, have prepared plans for improving the premises.

The CHORLEY Corporation is negotiating for ten acres of land in Bannerman Terrace for a housing scheme.

The Lancashire C.C. is to reconstruct the canal bridge in Whalley Road, CLAYTON-LE-MOORS, at a cost of £7,570.

The Lancashire C.C. is to reconstruct Haskayne bridge at HALSALL, at a cost of £20,500.

The Chesterfield Education Committee is to erect a junior school for 200 pupils at HIGHFIELD.

The HULL Corporation has purchased 174 acres of land on the Bank estate for housing purposes.

At a meeting of the HULL Education Committee the education directors reported that preliminary plans for the erection of the proposed Riley High School were nearly completed.

The HULL Corporation has approved plans for the erection of a wash-house at the corner of Hessle Road and Regent Street, at a cost of £20,000.

The HULL Education Committee has approved plans for the erection of two departments of a school on the Parkfield Drive site, with accommodation for 400 junior and infant children and for 480 senior girls.

The Ministry of Health is to hold an inquiry in the County Hall, Preston, into the application of the LANCASHIRE County Council to borrow £130,000 for extensions.

The LANCASTER Corporation is promoting a Bill for the construction of additional waterworks.

The LEEDS Corporation has obtained sanction to borrow £186,000 for housing schemes.

The LEEDS Corporation is seeking sanction to borrow £23,850 for the acquisition of land and buildings in connection with the West Street unhealthy area improvement scheme.

The LIVERPOOL Corporation is seeking the requisite powers for the construction of a reservoir in the Whiston district.

The Lancashire C.C. is to reconstruct Lollies bridge, LYDIATE, at a cost of £13,000.

The MANCHESTER Corporation is to erect 392 houses at Newton Heath, Blackley and Wythenshawe.

The OLDHAM Education Committee has acquired a site at Limeside, for the erection of an elementary school.

The OLDHAM Corporation has passed plans prepared by Messrs. Taylor and Simister, for the erection of administrative and staff blocks at the Strinesdale Sanatorium, at an estimated cost of £10,000.

Plans passed by the OLDHAM Corporation: Alterations, 194 Union Street, for Lloyds Bank, Ltd.; rebuilding "Grey Horse" Inn, Union Street, for Messrs. Frederick Robinson, Ltd.; transformer house, Greenbank Mills, Glodwick Road, for Messrs. Lees and Wrigley; lodge and entrance, Boundary Park Hospital, Rochdale Road, for Oldham Corporation Health Committee; twenty-one houses, Eton, Thorncliff and Cheviot Avenues, for Messrs. H. Partington and Sons.

The Lancashire C.C. is to reconstruct the Denny Beck bridge at QUEENMORE, at a cost of £13,850.

The Lancashire C.C. is to reconstruct Spark Bridge, RUFFORD, at a cost of £31,000.

The SALFORD Corporation has purchased three-and-a-half acres of land at Wheaters Field, Lower Broughton, for a re-housing scheme.

The SHEFFIELD Corporation has passed the revised plans for a new central library and an art gallery, submitted by the city architect.

The STOCKPORT Corporation is seeking powers for the construction of reservoirs in the counties of Chester and Derby.

Plans passed by the STRETFORD U.D.C.: Seven shops and houses, Moss Road, for Messrs. Suburban Building Co.; thirty-three houses, Stothard Road and Bramley Avenue, for Messrs. E. Jackson and Sons Ltd.; eight houses, Hillingdon Road, for Mr. J. E. Littler; six houses, Talbot Road, for Messrs. G. H. Brown and Son; extension, Westinghouse Road, for Messrs. Redpath, Brown & Co., Ltd.; additions, rear 724 Chester Road, for Messrs. Cotton Storage Co., Ltd.; office extension, Skerton Road, for Messrs. W. J. Brookes and Sons, Ltd.; transformer house, Fraser Road, for Wood Straw Co., Ltd.; castings store, Elsinore Road, for Messrs. Muir-Hill (Engineers), Ltd.

WALES

The Narberth R.D.C. has prepared plans for the erection of a bridge at DOLWEN.

The Milford Haven U.D.C. is to construct a new bridge at HAKIN at a cost of £27,500.

SCOTLAND

The GLASGOW Corporation is to obtain land for the reconstruction of the bridge over the River Cart and the improvement of Crookston Road, at a cost of £40,000.

Messrs. Mactaggart and Mickel, Ltd., are to erect twenty-two houses at King's Park, GLASGOW.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to December 31, 1929: 1919 Act, by local authorities, 25,129: 1919 Act, by public utility societies, 421; private subsidy schemes, 1919 Additional Powers Act, 2,324; slum clearance schemes, 11,022; under construction, 1,782: 1923 Act, by local authorities, 4,028; under construction, 2: 1923 Act, by private enterprise, 17,494; under construction, 1,243: 1923 Act, by public utility societies, 86: 1924 Act, by local authorities, 41,672; under construction, 5,200: 1924 Act, by private enterprise, 1,431; under construction, 1,498: 1924 Act, by public utility societies, 127; demonstration houses, 17; steel houses erected on behalf of Government by Scottish National Housing Company, 2,552. Total completed, 106,297; total under construction, 9,725; complete total, 116,022.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B_1	Abingdon ..	S. Counties	1 5	1 0½
A_1	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A_1	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C_1	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B_2	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A_1	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B_1	Chatham ..	S. Counties	1 4½	1 0½
B_1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.
The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour:* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1 3 0	*Trailer*	£0 15 0
3-ton motor lorry	3 15 0	*Steam roller*	4 5 0
Steam lorry, 5 ton	4 0 0	*Water cart*	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
IF left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 1 17 6
DO. 6-2-1, per yd. cube . . . 1 12 6
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 14 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube . . . 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0

Portland cement and sand, see "Excavator" above.

Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4 5 6
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9½ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 5 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0

Cement and sand, see "Excavator" above.

Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30 0 0
DO. in cement do., per rod	32 10 0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra.	0 0 7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side, per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in., per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6

Cement and sand, see "Excavator," etc., above.

HOISTING and setting stone, per ft. cube	£0 2 2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 3
DO. 2½ in. thick, per ft. sup.	0 1 6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:	*Med. Grey*	*Med. Green*
Portmadoc Ladies		£14 0 0
Countess		23 0 0
Duchess		32 10 0
Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3
Green Randoms, per ton		8 3 9
Grey-green do., per ton		7 3 9
Green peggies, 12 in. to 8 in. long, per ton		5 13 9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 2 2

Cement and sand, see "Excavator," etc., above.

Hand-made tiles, per M.	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
DO. *Peggies, per ton*	7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms		6 7 0
Grey-green do.		5 9 0
Green peggies, 12 in. to 8 in. long		4 13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square 3 17 6
DO., machine-made do., per square . 3 7 6
Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):	
7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 4 6
DO. *T. and G., 1 in., per sq.*	1 4 6
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 6
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 2
DO., *ft. cube*	0 14 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube . . 0 4 6
DO. framed in floors, roofs, etc., per ft. cube 0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube . . 0 8 6
PITCH PINE, add 33⅓ per cent.

FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ¾ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
[4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 8½d. *per hour;* MATE, *do.* 1s. 3½d. *per hour;* ERECTOR, 1s. 8½d. *per hour;* FITTER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9d. *per hour;* MATE OR LABOURER, 1s. 4d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 11½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 7½d. *per hour.*

Glass: 4ths in crates:

Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. *½ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet. 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 7½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* FRENCH POLISHER, 1s. 8½d. *per hour;* PAPERHANGER, 1s. 7½d. *per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

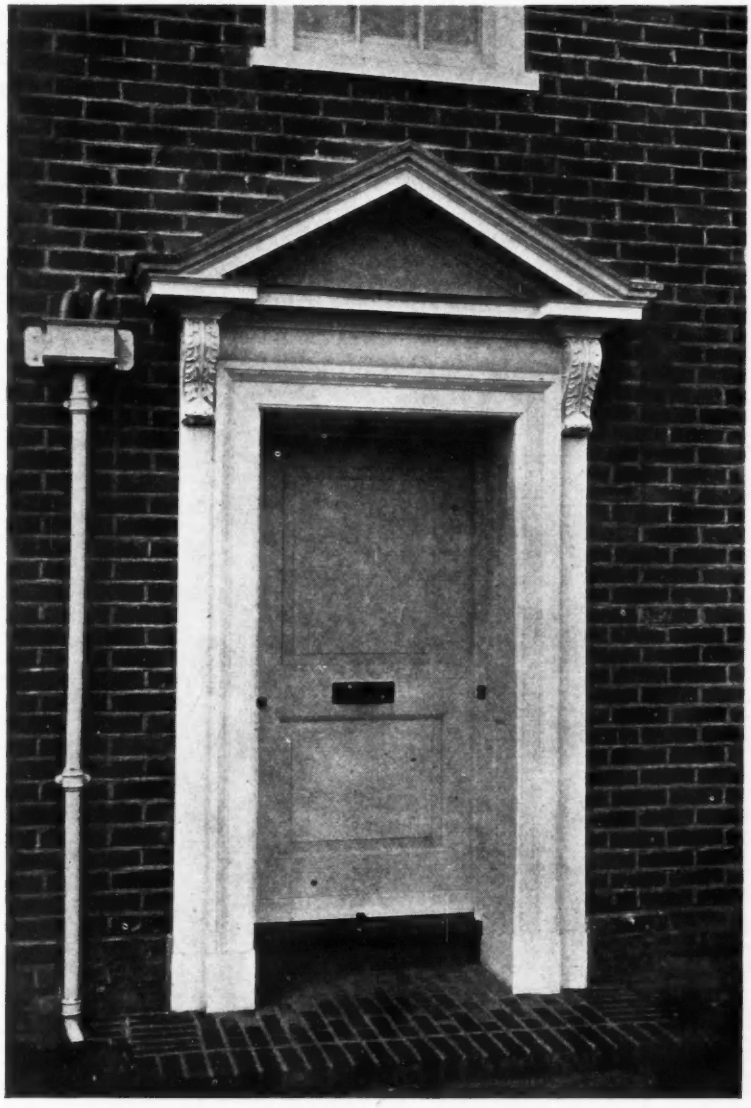
SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster-board, per yd. sup from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. from	0	2	3
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards. plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	5½	5	2	8	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—



FRONT ENTRANCE: THORESBY, CAVERSHAM HEIGHTS, READING.

BY

WILLCOCKS AND GREENAWAY

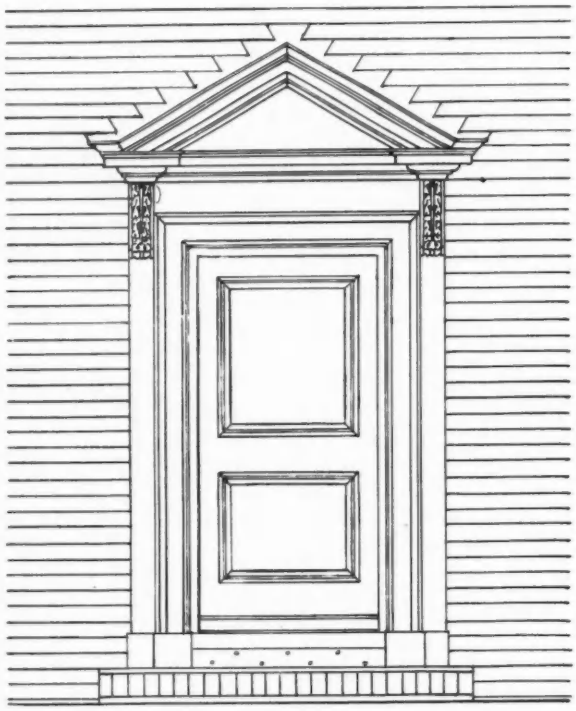
THIS doorway is the entrance to a house, simply designed in Georgian style, and compactly planned, the walls of which are built of 11-in. brickwork, with selected deep red multi-coloured facings, pointed with a wide, buff, rough mortar joint, and support a roof of stained sand-faced tiles.

The architrave and pediment of the doorway are in wood, painted white, the brackets being enriched with carving by Miss C. Wilson, of Reading University. Ordinary bricks-on-edge, set in cement, form the external step. The door sill is raised 2 in. above the floor line to allow the door to swing clear of the doormat.

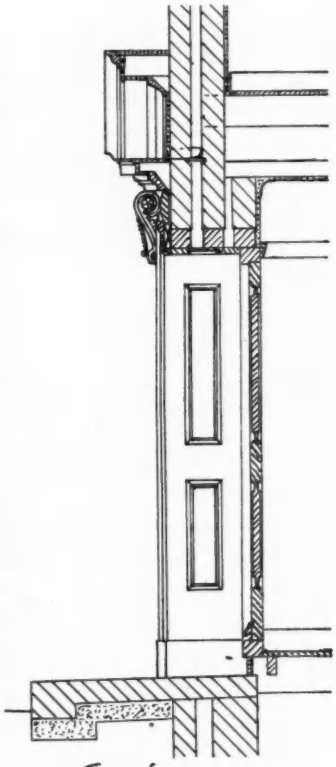
Working and large-scale detail drawings are reproduced on the following page.

"Thoresby," Caversham, Reading.

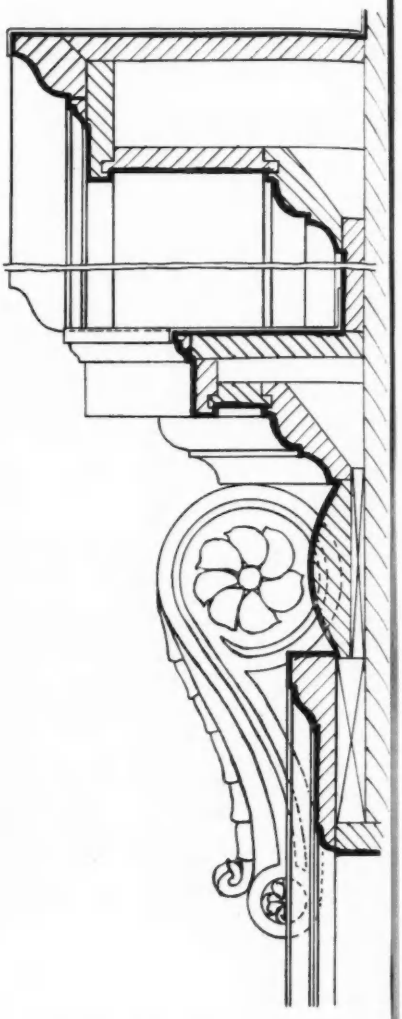
The Front Entrance.



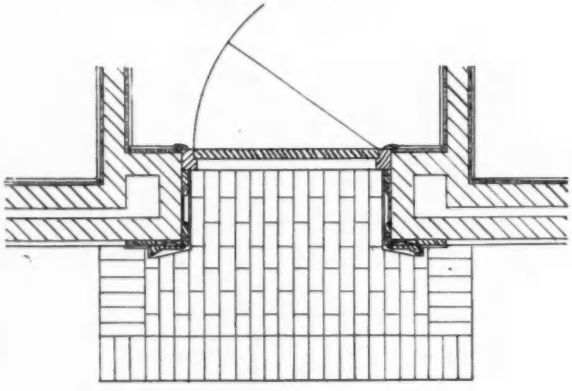
Elevation



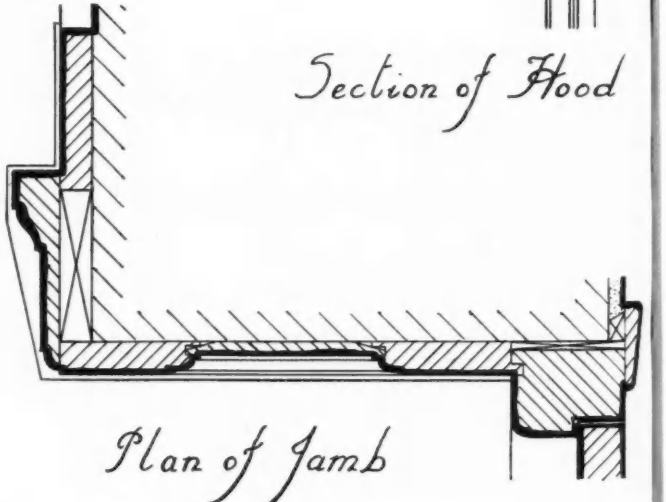
Section



Section of Hood

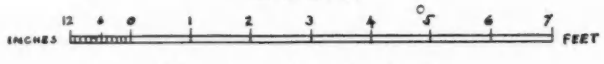


Plan

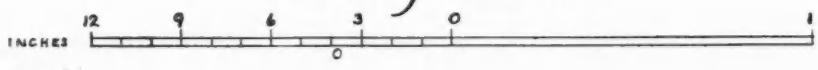


Plan of Jamb

Scale.

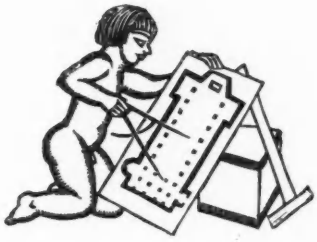


Scale for Details.



Willcocks & Greenaway
Architects, Reading

For photograph, see previous page.]



WEDNESDAY, FEBRUARY 26, 1930

CHARING CROSS BRIDGE— And After

AFTER a defeat a good general will take stock of the situation with a view to informing himself of the causes of his failure. It is well for him if he will drink the cup of his humiliation to the dregs. Let him beware of complacency and, if he indulge in recriminations, let these not be directed against his enemies who, perhaps, it may seem to an impartial observer, have only succeeded because the general himself has displayed conspicuous defects of judgment.

The London County Council and the Southern Railway have won their case in Parliament, with a result that, as far as London is concerned, can only be described as an architectural disaster of the first magnitude—unless a miracle intervenes and the Bill happens to be amended out of all recognition in Committee. Who was the general upon our side who so unsuccessfully led the campaign on behalf of the architectural profession and the other learned bodies who were opposing the measure which was accepted by Parliament on February 20th? Alas! there was no general: there was no organized plan of campaign, but merely a few skirmishes, conducted by stout-hearted individuals. Even among these the team-work was poor, and there was not evolved any policy of combined attack.

Obviously the only way to defeat the official scheme for Charing Cross Bridge was to suggest an alternative agreed upon between the representatives of the Royal Institute of British Architects, the Town Planning Institute and other authorities especially entitled to form an opinion on the subjects at issue. This alternative scheme should have been represented in the form of a model deposited in the House of Commons before the debate was due to take place. Granted that the time was short and that the London County Council succeeded in shrouding their designs in secrecy as long as they possibly could, there would still have been time for concerted action.

Sir Reginald Blomfield alone among the protagonists on our side appears to have understood the strategic situation. He produced an admirable layout plan for Charing Cross Bridge and its environs, which we commended in these pages, and we urged, then, that it should be the subject of immediate discussion among those who were conducting the opposition to the official scheme on behalf of the architectural profession. Nothing, however, was done.

But perhaps it would be wrong to say this, because something *was* done; yet that something was incredibly maladroit. It appears that the votes of members of Parliament were in many cases decided in favour of the London County Council Bill as soon as the Minister of Transport had read a certain letter addressed by Mr. Arthur Keen, chairman of the Thames Bridges Conference, to Sir Edwin Lutyens. The Minister who closed the debate naturally introduced this particular *bonne bouche* at the end of his discourse, so that its flavour should remain vividly in the recollection of Members when they walked into the division lobbies. This was a particularly clumsily worded letter, in which the writer sought to obtain from Sir Edwin Lutyens an assurance that the Charing Cross Bridge scheme, to which Sir Edwin Lutyens had set his seal of approval, was not, in point of fact, approved by him. If Sir Edwin Lutyens would only consent to do this, wrote Mr. Arthur Keen, "it would be a good thing for you as well as for us who are opposing the Bill."

Sir Edwin Lutyens is convinced that the layout of the roads at either end of the proposed new Charing Cross Bridge, which was agreed upon by the engineers of the London County Council and the Southern Railway, is not only good from the traffic point of view but also represents a triumph of civic design. He is fully entitled to that opinion. Meanwhile, however, members of the Royal Institute of British Architects and others who are interested in the prosecution of causes such as architects must necessarily have at heart, will seek an assurance from those competent to give it that Mr. Arthur Keen will write no more letters on behalf of the Thames Bridges Conference.



THE LION BREWERY, LAMBETH: A STUDY BY E. MAXWELL FRY

In this drawing of a building, awaiting demolition to make way for the Southern Railway's projected new station, the view-point is through the entrance archway into the courtyard, with its offices flanking, and its pavement leading up to, the massive temple of malt—the brew-house.







Personalities in the Charing Cross Bridge Bill Debate: Mr. Herbert Morrison, Minister of Transport, who supported the scheme; Sir Edwin Lutyens, Architectural Adviser to the Government; and Sir William Davison (from the portrait by Sir William Llewellyn, P.R.A.), who opposed the Bill. A special report of the debate appears on pages 345-6 of this issue.

NEWS & TOPICS

CHARING CROSS BRIDGE

HOWEVER disappointing the debate on Charing Cross Bridge—by arrangement I leave this subject to other pens—it has not lacked its "sensation," as the papers have it. On Monday *The Daily Telegraph* announced the resignation of Sir Edwin Lutyens from the R.I.B.A., after twenty-four years' membership, as its "dramatic sequel." I should not be surprised to learn that it was absolutely unconnected therewith.

THE LION BREWERY, LAMBETH

Whatever happens to the Charing Cross Bridge Bill, "improvements" on the southern bank will obliterate little of real architectural value, although among the romantic hotchpotch there are to be found relics as interesting as the old Lion Brewery. Classic stucco jibbed at nothing when it made a brewery look like the entrance to an embassy on the one hand and a Government building on the other. It is rather laughable, but on the other hand it is an example of a vernacular handled with great skill; and were it not a brewery, and forgetting for the moment what we know of functional expression, it is a work of considerable imagination.

RURAL AMENITIES BILL IN COMMITTEE

The House of Commons rose to the occasion of the second reading of Sir Hilton Young's Rural Amenities Bill, all parties combining to give to it the attention it deserves. Sir Hilton Young first paid tribute to the great societies whose unremitting labours in the cause of public welfare had made possible the framing of the Bill, before he went on to outline its various clauses.

*

There is not space enough to do justice to an account of wide powers which the Bill seeks to confer upon country and county authorities. A mere list is informative. Clause 2 proposes to extend town planning to country planning; Clause 5 to grant county councils the power at present enjoyed by the Ministry of Transport to acquire strips along the sides of new roads in order to prevent "ribbon" development. Clause 9 is a "ginger" clause that allows county councils to step in where district authorities take no action. Another clause prevents the export of ancient buildings, and yet another seeks to prevent the unnecessary cutting down of trees, hedges and woods. A very interesting clause is that which attempts to adjust the balance between compensation and betterment in the case of land which is earmarked for open spaces. It is proposed to work out a scheme whereby compensation will be paid to the owner of scheduled land by means of a betterment rate, to be levied upon the adjacent land the value of which has been automatically increased. This aims a blow at selfish land speculation, and if passed would make many fine things possible.

*

One realizes, of course, that a great deal of committee work must purge the present draft and make it workable, but it is significant that the spirit of the Bill was not criticized, and that it was read a second time without a division. What criticism it received was directed to clarify its wording with the object of making it more generally applicable, and was subsequently withdrawn. Its further course will be watched with unabated interest.

THE PRIZE-WINNERS AT SWANSEA

The partnership of Ivor Jones and Percy Thomas which has just resulted in their triumph at Swansea is remarkable in many ways. Both are men of similar age and temperament, who yet supplement each other's gifts. Ivor Jones served his articles in the office of his father, a well-known Cardiff architect, but very early in life started practice "on his own," and in 1912 was joined by Percy Thomas, who previously had spent several years in architects' offices in Manchester. It is interesting to note that during his pupilage he won the first prize for architecture at the National Eisteddfod. He is a brilliant draughtsman and his sketches have been exhibited at the Royal Academy. Incidentally, he is a convinced Classicist, and is quite satisfied with the English Renaissance tradition, which he thinks is quite capable of being adapted to our modern needs.

*

The Swansea award will be extremely popular throughout South Wales, where both architects have established a reputation for good building. Their first success was in their competitive design for the Cardiff Technical College. Shortly after, they were placed second in the competition for the Cardiff Fire Station. Their competitive designs were accepted for the new Police and Fire Station both at

Bristol and at Newcastle-upon-Tyne. Anyone looking at the Swansea designs will recognize at once that they are by practised hands. Nobody has yet analysed "the competition touch," which can only be gained by long experience. An extreme neatness and simplicity of planning, a certain vigour of downrightness in the draughtsmanship are, perhaps, the chief ingredients.

NO DUTCH MANSION IN TRAFALGAR SQUARE

"Alas! for the misrepresentation of reporters!" writes Sir Herbert Baker, in regard to my recent note on the subject of the design of his new building in Trafalgar Square. "A representative from South Africa came to me, asking for information about the new South Africa House. I told him that it was too early to tell him anything about it as no design had been made, but that the conditions of the site imposed a design in harmony with its classical neighbours, the National Gallery and St. Martin's Church. When he said that this would not be very 'South African,' I pointed out to him, first, that this was not South Africa, and, secondly, that there were good old examples of classical buildings in Cape Town, notably the present Government House and an old Dutch Governor's House in the suburbs. I should be glad if you will kindly publish this to correct the wrong impression given." In complying, I should like to add an expression of my contrition.

FATE OF LANSDOWNE HOUSE

At one time it seemed very unlikely that Lansdowne House would survive the intensive development of the district, but there is now every hope of saving, if not the entire design, then at least the fabric of the house—the façade and the form of some of the best entertaining rooms. The house has been bought by a newly-formed club, who are to turn it into a sort of super R.A.C. club, with swimming baths, gymnasium, and, in addition, a private theatre, with seating for 800, and a very large stage.

★

The theatre will be built over the courtyard at the back and side. Curzon Street will be pushed through into Berkeley Square to give access to the theatre and the club, so that the house will survive more as a relic of departed grandeur than as a perfect example. It was never to be expected that the courtyard would be saved, when one compared its quiet lawns with the towering masses that throw their shadow across it. Nevertheless, I am glad the house will not be destroyed, for we positively cannot afford to lose yet another piece of good work. We shall be beggared!

DEVELOPMENTS AT DAGENHAM

The erection of the Ford Motor Company works at Dagenham raises some problems, which town planners will follow with interest. The population of Dagenham was increased rapidly when the L.C.C. conducted a quite artificial exodus of urban workers to their Becontree Estate. A still more rapid increase will be the result of the establishment of the Ford works, the 15,000 workmen of which must find homes in the district. What, therefore, was an attempt to provide housing on cheap land outside the urban radius may very well turn out to be the nucleus of a new town formation, artificially created. The interest will lie in the measure of success with which population may be attracted by the dual bait of work and adequate housing, though all this may be seen, of course, both at Welwyn and Letchworth.

A VICTORIAN "MILESTONE"

The 1885 scene from "Milestones" shows what is now a definitely crystallizing period. It was all horrid and nauseous a few years ago, but one has discovered of late that crewel work is occasionally beautiful, and quite often passable. It has distinct merits. Then there are those who admire mother-of-pearl inlay work; and no doubt there will be found defenders for each and every element of this fat, complacent, shiny, colour-blind, overpompous period. I see its relics in many an antique shop in Chelsea, but there is little good I see, little but a vain expanse of better mahogany than money can buy today.

ASTRAGAL



The set for the 1885 Act of "Milestones," at the Criterion Theatre.

THE CHARING CROSS BRIDGE BILL DEBATE

Specially Summarized by our Parliamentary Correspondent

AFTER a three-and-a-half hours' debate, the London County Council (Charing Cross Bridge) Bill was read a second time in the House of Commons last week by 230 votes to 62.

Sir W. Davison, in opposing the Bill, said that it dealt with perhaps the greatest improvement which had ever taken place in the history of London, and involved an expenditure of about £15,000,000. If a mistake were made now, it would be irrevocable and irreparable. If the scheme contained in this Bill were persisted in, many hundreds of yards of viaduct would cut off South London from future development. Practically the whole of professional opinion was against the London County Council's proposals. All the societies dealing with the improvement and the æsthetic future of London were opposed to the measure. Whether they were right or wrong, certainly inadequate consideration had been given to the present proposals. Owing to the fact that the debate had not been postponed, no model of the scheme was available.

Sir W. Greaves-Lord, who spoke in favour of the measure, said that the Royal Commission came to the conclusion that it would be wise to save Waterloo Bridge, but they also pointed out that if that were to be done it was absolutely necessary that a new bridge should be constructed in the neighbourhood of the present Hungerford Bridge, which took a line across the river which must be taken by any bridge that was built across the river in that neighbourhood. A bridge could not be moved very far to the east or west of Hungerford Bridge, because on either side of that bridge there were two Tubes over which it was impossible to construct a bridge.

If the bridge were placed nearer to Westminster Bridge on the one side or to Waterloo Bridge on the other, the navigable features of the Thames would be destroyed. There was a curve at that part of the river, and the channel was to be found on the outside of the curve, and it was essential that craft beyond a certain size must go to the Middlesex side of the river. That important factor had been discounted by many who raised æsthetic objections to the proposed new bridge.

The new bridge would relieve the Embankment and would not discharge more traffic on to it. The Royal Commission formulated their suggestions on the basis that the railway would not be taken to the south side of the river, therefore they did not fully consider the situation which would arise if the railway were removed. In the scheme now submitted there would be access to the Tubes that would be superior to the access that would be given by any other position that could be chosen.

One of the objections raised to the scheme was that it involved the erection of a railway station on the banks of the Thames, to the destruction of the river's beauty. Surely it was not impossible to construct a railway station with features that could be pleasing to the eye. He could not but believe that any one of the architects who raised this objection could design a building in harmony with its surroundings and in keeping with the County Hall and the Houses of Parliament.

It could not be said that the scheme had not been properly considered. A Royal Commission had sat upon it, and, since then, over thirty different designs for the bridge had been produced, every one of which had been thoroughly examined by the County Council and the Ministry of Transport. There was not one of those thirty schemes that had not got in it something that was absolutely objectionable and fatal to the considerations which had to be taken into account.

Was the House seriously to be asked to hold up a scheme to which there was no alternative, when a solution of the problem of London traffic was pressing and there was a great need for new sources of employment?

Sir Martin Conway, who moved the rejection, caused amusement by remarking that he did not know who was in favour of the scheme, while every body of intelligent men was against it.

This was a much larger problem than a bridge; it was a problem of town-planning. There was on the south side of the Thames a square mile of land right in the very heart of London. It was occupied at present by slums and ramshackle buildings of all kinds, but that square mile could be made to be the very centre of London. There was no reason why in that square mile they should not have streets as fine as Regent Street, or Piccadilly, or the Strand. That was what they wanted to arrange for; but to make that square mile what it should amount to they must have a proper system of town planning. He had not heard that the Ministry of Health, which was the town-planning authority, had been consulted at all.

The plan seemed to lack every merit. It lacked lucidity, simplicity, breadth of imagination, and suitability for human life and town development. It was botched on the very face of it.

They wanted five things. They wanted first to open out and make a splendid square mile on the south side of London. Next, to provide two great through routes—one from north to south, the other from east to west; the third was to relieve traffic in the Strand; the fourth to relieve the site famine which existed on the north side of the Thames; and the last was to pay the whole of the expense of whatever they did by the great increase in site values which could be obtained by treating the south side in a bold, broad, and fine manner.

He had reason to think that the whole expense of this proposed change could be defrayed by the increased rating values of that square mile if they treated the whole thing broadly and with imagination. They were asked to spend £15,000,000 on this rubbishy scheme, and there was not the ghost of a chance of getting much of it back. It was the bankruptcy of imagination. They must also, in such a scheme, consider the question of beauty.

Colonel Ashley, the former Minister of Transport, supported the Bill. After recounting the negotiations which he had had with representatives of the Southern Railway, he said he could not see why a station, overlooking the river, planned by an eminent architect, should not be a great addition to the view of London from the northern side of the Thames. From the traffic point of view, this would be a really important London improvement. The scheme would open up the dreary area around Waterloo Station, and in twenty or thirty years' time, if the plans of the London County Council were carried out, instead of being covered by mean houses, it would be covered by fine buildings. The Government were giving £9,000,000 and London ratepayers were finding £3,250,000 in aid of the scheme, not for æsthetic considerations, but for transport considerations, first, second, and third.

At the same time the Ministry of Transport was not unmindful of æsthetic considerations. Sir Edwin Lutyens, who was asked by him as Minister of Transport to advise on the scheme, had taken every precaution that it should be architecturally worthy of London. The House, he hoped, would

give the Bill a second reading, and he understood that in Committee the London County Council would readily adopt suggestions for its improvement.

Mr. Scurr, a Labour Member, said that after the fullest consideration of the financial, architectural and engineering considerations, the plan was the best that could be devised.

Sir Kenyon Vaughan-Morgan, on behalf of the London County Council, said it was a case of "now or never"; and it would be unwise to neglect the present opportunity.

Mr. Harris complained that there had been a great deal of criticism, but no unity. The critics had been very prolific in their letters to *The Times*, but when they were asked for an alternative there was no agreement, and they took refuge in silence. He had been attracted by the Lee scheme, but he was conscious that, just as there were artistic objections to the present scheme, there were even greater artistic objections to the scheme of the Royal Commission. The scheme should go to a Private Bill Committee, where it would get an impartial investigation. In spite of some heartburnings, he would vote for the second reading, but he hoped the House would pass an instruction that the London County Council should employ the best possible architects. The instruction which he was moving was to secure that the architectural features of the scheme should be submitted to open competition.

Mr. Morrison, the Minister of Transport, who supported the scheme, said that a number of the alternative schemes had been produced without a knowledge of the engineering facts which had to be faced. It was extraordinary that people should expect to be listened to as traffic experts when they suggested bringing the traffic from the proposed new bridge right on to the Thames Embankment.

The House really must face the central facts of the situation. One was the convenience of the Southern Railway. Its suburban electric lines were of very great importance to the housing of London. Parliament could, of course, make the Southern Railway do anything it liked, for Parliament was supreme. But Parliament knew that when an undertaking was made to do something that it did not like, the compensation to be paid was increased.

Another thing to be remembered was that the County Council was the town-planning authority of London, and they could be relied upon not to forget the town-planning considerations of the scheme. Neither the County Council nor the Government had an unlimited purse. Already there was £12,500,000 involved in the scheme, and that was not a small expenditure. The County Council had also some other schemes in hand for the improvement of London. The present scheme provided for embanking the river with a fine promenade and gardens along the river front. The whole line of the river from the County Hall to Waterloo Bridge would be available for fine buildings, the designs of which, including that of the station, would have to be submitted for approval. The County Council intended to develop the area behind the County Hall.

There had been wide misapprehension as to the use of the space between the new station and the County Council building. It was the intention of the County Council to secure by building restrictions that these sites should be occupied by fine buildings fronting the new roads. This would afford a magnificent architectural opportunity.

The so-called tunnels would really be covered roads, and need not be in themselves unattractive. An enormous amount of trouble had been taken with the scheme, and he held that it was a good scheme. Its critics could not agree on an alternative. The scheme before the House held the field and ought to be supported by the House.

It had been asserted that sufficient trouble had not been taken to make sure of the architectural merits of the proposals. The architect was always important, but he must be limited by the engineering and traffic essentials of a scheme. He could not have a free hand. Sir E. Lutyens was consulted before the engineering and traffic considerations were settled. When the protracted investigations had been completed and the essential technical requirements of the problem were known, the advice of Sir E. Lutyens was sought as to the possible layout for the scheme within the known requirements. Sir E. Lutyens devoted a great deal of time to the examination of the scheme, and he prepared a plan showing the layout he advised, and signed the plan jointly with the engineers. Sir E. Lutyens, on August 1, 1929, wrote to Sir H. Maybury, saying he had no doubt that the bridge and approaches as finally agreed upon were capable of distinguished expression in their architectural treatment. Sir E. Lutyens adhered entirely to the view he then expressed, and when the Bill was in Committee would give evidence for the promoters of the Bill.

Apart from these engineering and traffic limitations, Sir E. Lutyens had a free hand. The House ought to know the kind of pressure that was being exerted in support of this agitation. Sir E. Lutyens was out of the country on important work in India when this deputation was received. On his way home, when he could not have first-hand knowledge of the controversy which existed, he received at Aden a letter dated January 14, of which he took no notice except to place it in his (Mr. Morrison's) hands with the request that he should make what use of it he thought proper. It was written on the official notepaper of the R.I.B.A., but he did not know whether it had the authority or represented the views of that body. Indeed, he had been informed that this subject had never been on the agenda of the Council of the R.I.B.A. The letter was signed by Arthur Keen, chairman of the Thames Bridges Conference. Sir E. Lutyens was retained as an expert architectural adviser, and his relations with the Government and the County Council must be relations in which there was complete confidence between the three parties. The letter was as follows:

Dear Sir Edwin,

Charing Cross Bridge

The official scheme for the bridge is receiving a great deal of very damaging criticism, and *The Times* in particular has attacked it very resolutely more than once. From every standpoint it is criticized—the interests of railway passengers, cost, time to be occupied in getting the work done, the development of South London, architectural character, and so forth. The Minister of Transport and Sir Percy Simmons are using your name to justify the whole thing, whereas it has already been found out that the three principal things—the position of the station, position of the bridge, and level of the northern approach from the Strand and not from the Embankment—were given to you as unalterable items in the scheme. We believe also it was said that the southern approach should start by the New Cut. In my judgment your reputation is suffering by your name being identified with the scheme which is very severely criticized in print, and I suggest that you should do something about it. Could you not write to me or to the President, R.I.B.A., to say that you had no free hand, but that the items mentioned were already settled? I feel sure that the Bill will be rejected in Parliament, and if we could publish a few lines from you, stating that in all essentials the layout was settled without reference to you, it would be a good thing for you as well as for us who are opposing the Bill.

That was a most improper letter, and the House of Commons ought to know the kind of tactics that were being employed and the kind of pressure that was forthcoming on this matter. If this scheme were rejected, the County Council would be free from its understanding with the last Government to retain Waterloo Bridge and build Charing Cross Bridge.

The second reading was carried by a majority of 168; and the House then agreed to the following instruction, moved by Mr. Harris:

That it be an instruction to the Committee to insert clauses, or obtain an undertaking from the promoters, to secure by competition or otherwise designs for the bridge and architectural treatment of the viaduct.

LOCARNO DANCE HALL, STREATHAM HILL, S.W.

DESIGNED BY TREHEARNE AND NORMAN, PRESTON & CO.

IN the good old days, when the citizens of London wanted to enjoy themselves, they set up a maypole in Leadenhall Street and danced round it. The maypole has gone—burnt, it is said, as a wicked relic of idolatry—and dancing down the middle of Leadenhall Street is a diversion that has been discouraged by the City Fathers for many years.

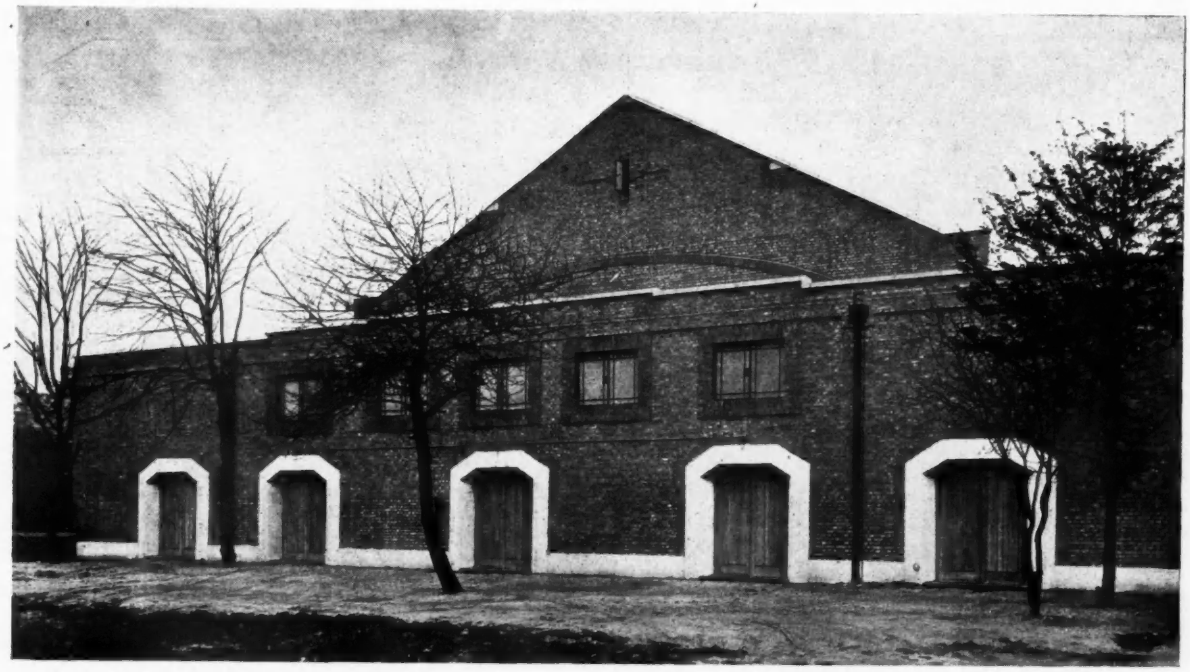
Nevertheless, an instinctive desire to dance on occasion still persists among most normal human beings, and the modern dance hall has been evolved to meet it. Locarno, at Streatham Hill, is not based on any historic precedent. Like Topsy, it "just growed."

Instead of spending weeks in libraries, searching files of old periodicals for precedents on which to base their design, the architects adopted another procedure. A sketch scheme was prepared and each individual member of the staff offered his criticisms and views. The various ideas and opinions were incorporated in amended drawings, which were then subjected to the intensive criticism of stage managers, band conductors, experts on ventilation, professional dancers, authorities on carpets, cloakroom attendants, cabaret artists, hairdressers, experts on acoustics, furnishing specialists, soda-fountain magicians, automatic coin meter wizards, catering managers, authorities on fire hydrants, cigarette ash-tray experts, broadcasting experts, optimists, pessimists, and odd members of the general public who might reasonably be expected to pay for admittance when the hall opened. The tattered remnants of the drawings were afterwards deposited with the London County Council, and the result is Locarno.

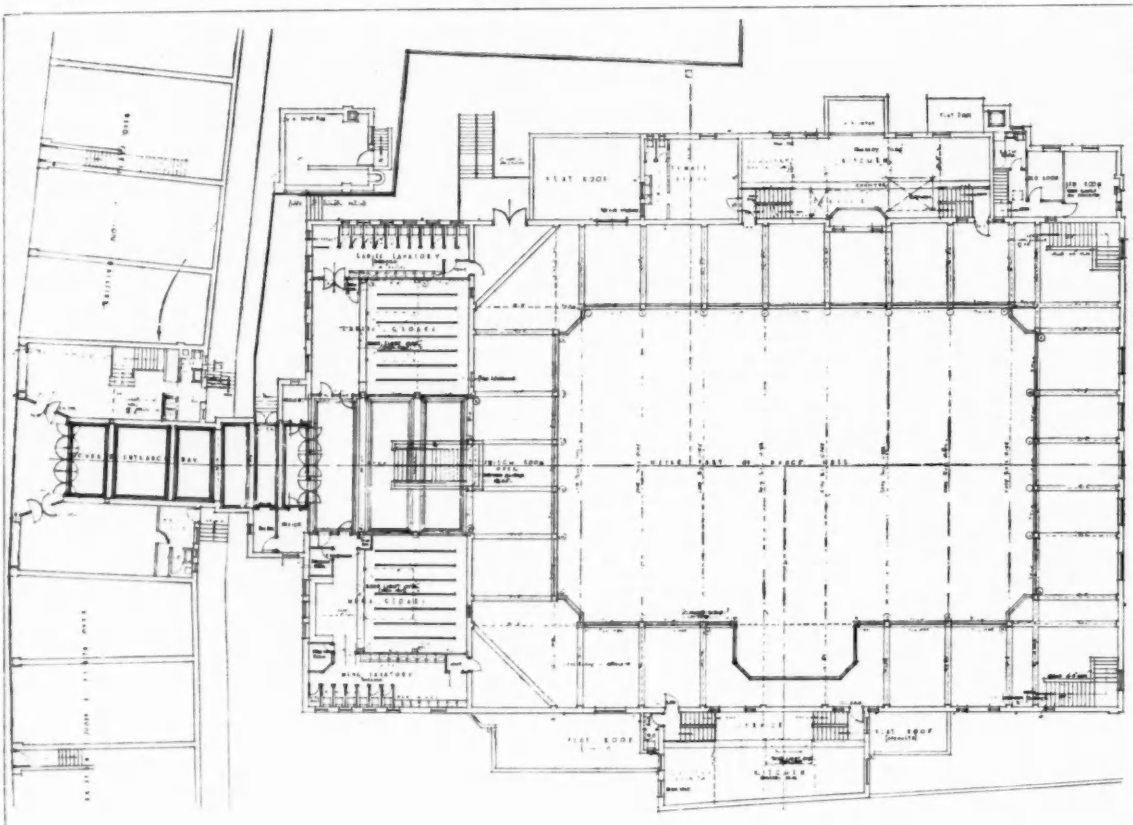
In designing a dance hall an architect must exhibit tolerance, exercise diplomacy, and display great good humour. He must be prepared to accept criticism on æsthetic matters from catering specialists, and hear adverse comment on decoration from those skilled in the



No photograph of the entrance elevation, as it was designed, being available, this view is that seen on entering the main doors. The walls are faced in texture plaster, in blue and silver, and the floor is of rubber, blue, buff and grained.



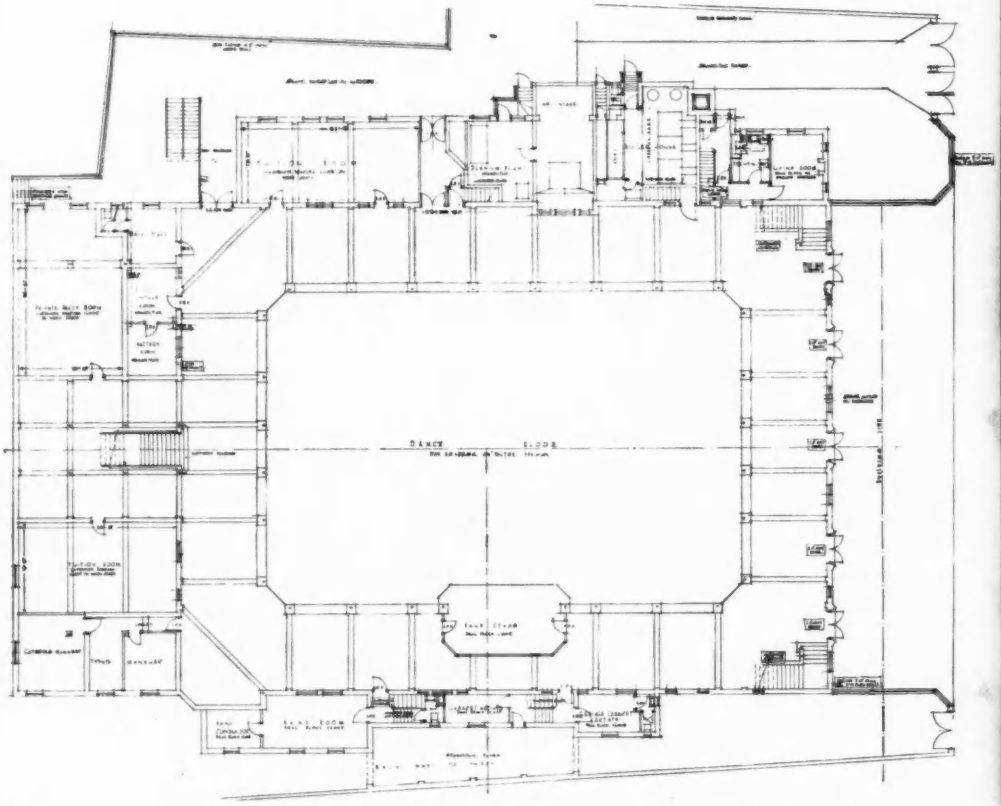
The back elevation. The walls are of multi-coloured bricks, with red brick and artificial stone dressings. Metal casement windows are fitted. The architraves of the doors, which are provided for exit purposes only, have a family resemblance to the arch in the interior, in the upper view on this page, and strike a distinctive note in the design.



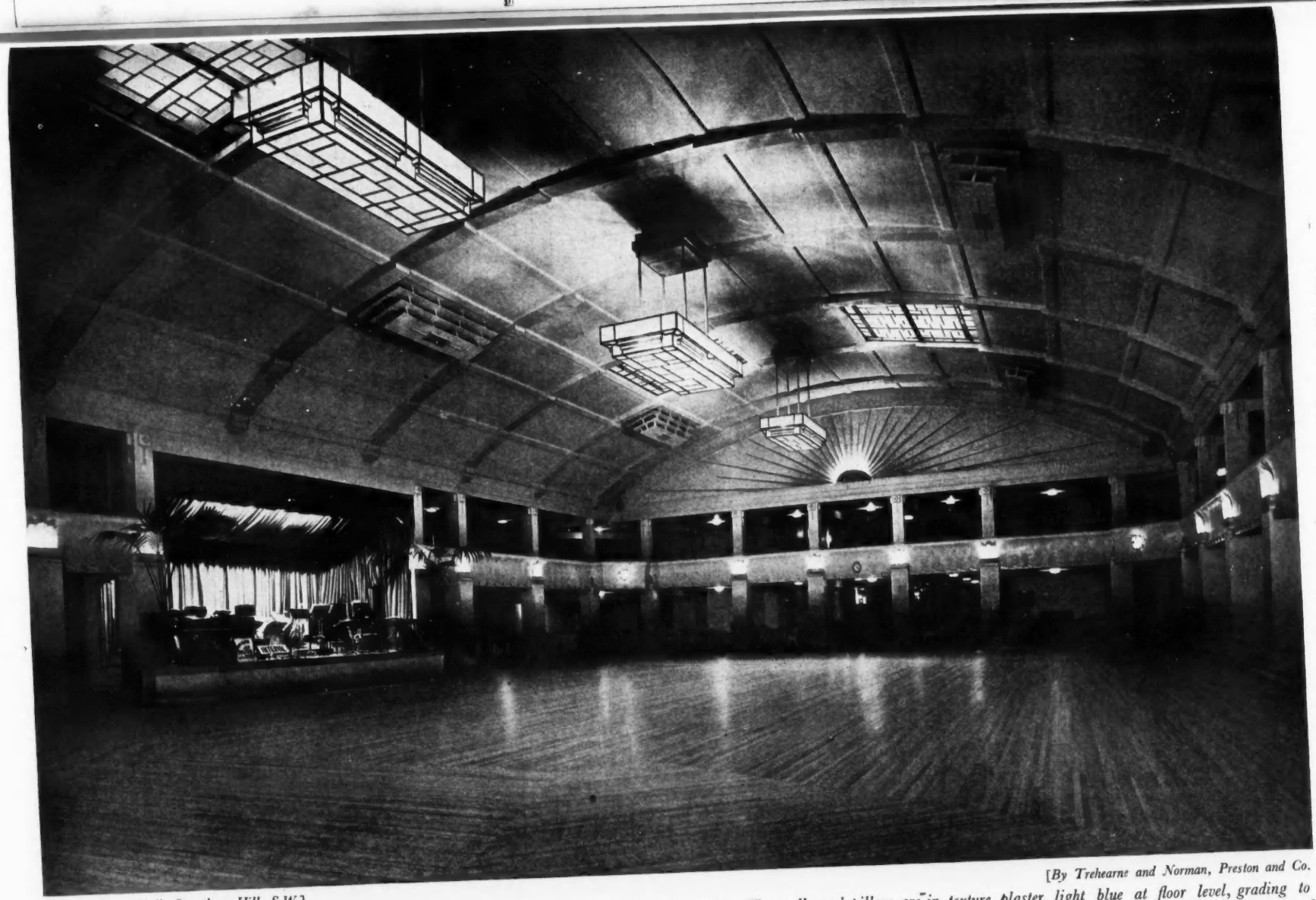
Plan of the gallery floor, which is on the same level as the entrance hall. Among the notable features of this plan are the two kitchens, one on either side of the gallery, and each independent in its service arrangements of the other.

Locarno Dance Hall, Streatham Hill, S.W.

By Trehearne and Norman, Preston & Co.



On the ground floor is the dance hall, which is approached by staircases leading down from the gallery and crush hall, entered from the Streatham Hill front. Other accommodation on this floor includes tuition rooms, private party, band, and cabaret artistes' rooms. The spring dance floor, of oak in narrow strips, can be locked if required during cabaret and other performances. Exits are at the rear of the hall.



[By Trehearne and Norman, Preston and Co.

Locarno Dance Hall, Streatham Hill, S.W.]

The dance hall looking towards the staircase (beneath the sunburst) leading up to the crush hall. The walls and pillars are in texture plaster, light blue at floor level, grading to orange towards the ceiling. The latter and the curtains on the band stage are of neutral tint to take the various lighting effects in red, blue and amber, and combinations of these colours, obtained from the hanging lanterns, the lay-lights and the lamps on the heads of the pillars. The lighting of the sunbursts, of which there is one at each end of the hall, is arranged for sunrise aud sunset effects.



Locarno Dance Hall, Streatham Hill, S.W.] [*By Trehearne and Norman, Preston and Co.*

Looking up the main staircase from the dance hall to the crush hall. The snails are in fibrous plaster and their eyes are red lamps.

contrivance of ingenious receptacles for cigarette ends, but he will also discover that everybody expects a first-class dance floor, a good orchestra, adequate cloak room and lavatory accommodation for both sexes, and effective methods of control of temperature and ventilation.

The introduction of a certain mirthful element is permissible in the treatment of a decorative scheme designed for effect under artificial light. In the contract specification for the erection of Locarno, no provisional sum was allowed for jokes; but instead of conventional newel caps at the foot of the main staircase it was found possible to incorporate in the decorative scheme newel caps of an unusually hilarious type.

No photographic record of the architect's design for the front elevation of Locarno, before it was enriched by the attachment of illuminating devices, is now available, and a view of the rear elevation is therefore given.

CORRESPONDENCE

THE EXPERT WITNESS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The article in your issue of the 12th inst. has aroused my interest, and although it is rather late to comment on it, I have not had an opportunity to do so earlier.

The author is undoubtedly correct in his condemnation of those "experts" who are willing to give evidence on either side, as he is also right in describing the proper attitude for an expert witness.

Unfortunately, the position of the expert witness in this country is essentially anomalous for he must be called by one of the parties. This is not his position in some Continental courts and the anomaly does not there exist.

It could be removed in this country, as in some others, by one of three courses:

1. By the judge referring all the technical matters to an arbitrator, skilled in the technology of the subject.
2. By the judge having one or more technical assessors sitting with him and appointed by him.
3. By both parties agreeing to arbitration (instead of going to Court) and choosing an arbitrator with the requisite knowledge.

The last course is usually the best in most instances, as even when the legal position is not clear the arbitrator can always make his award subject to a special case in which he states the legal questions on which he does not wish to give an opinion; a judge in chambers then issues a judgment thereon which, in effect, forms part of the award.

I have never found the parties to an arbitration dissatisfied with my award on technical grounds. This I attribute solely to the fact that in matters of which I have technical knowledge I am able, either to dispense with expert witnesses (by arrangement between the parties) or to know just what credence to give to the statements of the expert witnesses engaged.

As arbitration with a technically expert arbitrator is much cheaper and quicker than a hearing before a judge, it would be advantageous to all concerned if there were more arbitrations and fewer hearings in the courts of technical cases. The anomalies of expert witnesses appearing for one side in an action would then largely disappear.

A. B. SEARLE



Locarno Dance Hall, Streatham Hill, S.W.] [*By Trehearne and Norman, Preston and Co.*

The crush hall, looking towards the dance hall. The walls are in texture plaster, in buff and light buff, and the staircase surround, of the same material, is in light blue. The grilles to the staircase are of metal and the handrails of oak. Red concealed lights illuminate the wall above the pillars, seen at the back of the staircase well. The general lighting scheme is amber.

ARCHITECTS AND BRITISH MATERIALS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—In view of the disproportion of our import to our export trade, and the imperative need of Great Britain to become more self-supporting, could not architects assist by taking care to specify wherever possible only British or Empire materials?

I suggest that a recommendation to this effect from the Council of the R.I.B.A. to its members, together with some means by which the members could signify their intention of adherence to this principle, would materially help the building industry and the reduction of unemployment.

FRANK SCARLETT

THE BATTLE FOR ARCHITECTURAL REGISTRATION

The Æsthetic Front

BY A. TRYSTAN EDWARDS

WHILE it appears that the professional front of the Registrationists, which I explored last week, is invulnerable, their æsthetic front is weak, and has, in fact, been broken through with the greatest ease on each occasion when their Bill has been presented to Parliament.

Two courses therefore lie open to them. Either they can strengthen their æsthetic front so that they can make a victorious advance in that quarter, or else they can definitely close that front and offer battle on the professional front only. The first course is quite possible, but might take many years to accomplish. The second course is immediately practicable, and if adopted would lead to the passing of a Registration Act which would give to the architectural profession all that they really want and all that at the present moment they have a right to ask. When, however, the Registrationists contend that the passing of their measure would raise the average level of architectural design, they speak in terms of dogma and not of reason.

It is true that the R.I.B.A. has never set up its own examinations as the one test to which a practising architect should submit. The Board of Architectural Education, which would be set up by this Bill, guarantees that there will be no narrow professionalism in the body which will watch over the future of the architect. A number of schools of architecture are exempt from the R.I.B.A. examinations, and can establish their own tests; so there is room for many different types of training, and many different opinions concerning architectural design are encouraged to find expression. The R.I.B.A. is generous, tolerant and open-minded.

To this, Members of Parliament might reply: "We do not respect your tolerance and open-mindedness if these qualities result from a failure to establish an acceptable theory of your own art. We granted the doctors Registration, not because they were tolerant and open-minded, but because they were able to persuade the public that they were in substantial agreement and possessed definite knowledge, without which nobody could with safety be allowed to practise as a surgeon or physician." Unfortunately in our own profession we find a very different state of things. Distinguished architect A is convinced that the designs of distinguished architect B are execrable, and most of us are battling in a tempestuous sea of doubt and confusion as to what does or does not constitute good design.

If the case for Registration, however, is in any degree whatsoever dependent upon the ability of the architect to establish his claim to possess definite qualifications as an artist, we must give the public some assurance that we do, in fact, possess knowledge concerning what is or is not good architecture. This is a matter of æsthetic philosophy, but its practical implications are obvious. It must be confessed, however, that a large number of architects are accustomed to pride themselves upon their rejection of all æsthetic canons which are based upon logic. It is not that they wish to defeat the legitimate political objects of their own profession; yet they are, nevertheless, unconsciously disloyal to them. The reiteration of the doctrine that good architecture is dependent upon some indefinable thing called taste, or, worse still, the personality of the designer, is most definitely injuring the prestige of the architectural profession as a whole.

It may be admitted that the formulation of principles of architectural design involves a considerable intellectual effort, but it does not follow therefrom that the effort is not worth while, nor that the object of it is unattainable. This attempt to find an impersonal standard of æsthetic judgment is surely an honourable one, for even if an error is stated so unequivocally that it must needs be exposed, the truth is advanced thereby. The average Member of Parliament will not give his intellectual respect to architects who say in the same breath that they wish to be given an official status as the exponents of architecture, and then, with a puzzled look on their faces, exclaim "What is architecture?"

While utter vagueness of opinion and a refusal to acknowledge an æsthetic standard in their work brings architects into disrepute among ordinary workaday folk who have learnt to admire definite accomplishments, there is a form of dogmatism with regard to design which is more harmful to the profession of architecture even than sentimentality or muddle-headedness; and that is the confident statement that good architecture results from good construction and from what is called the expression of fitness for purpose. If these are the only desiderata in architecture, why not let the builders and engineers assume our professional duties and let the architectural profession commit hara-kiri at once?

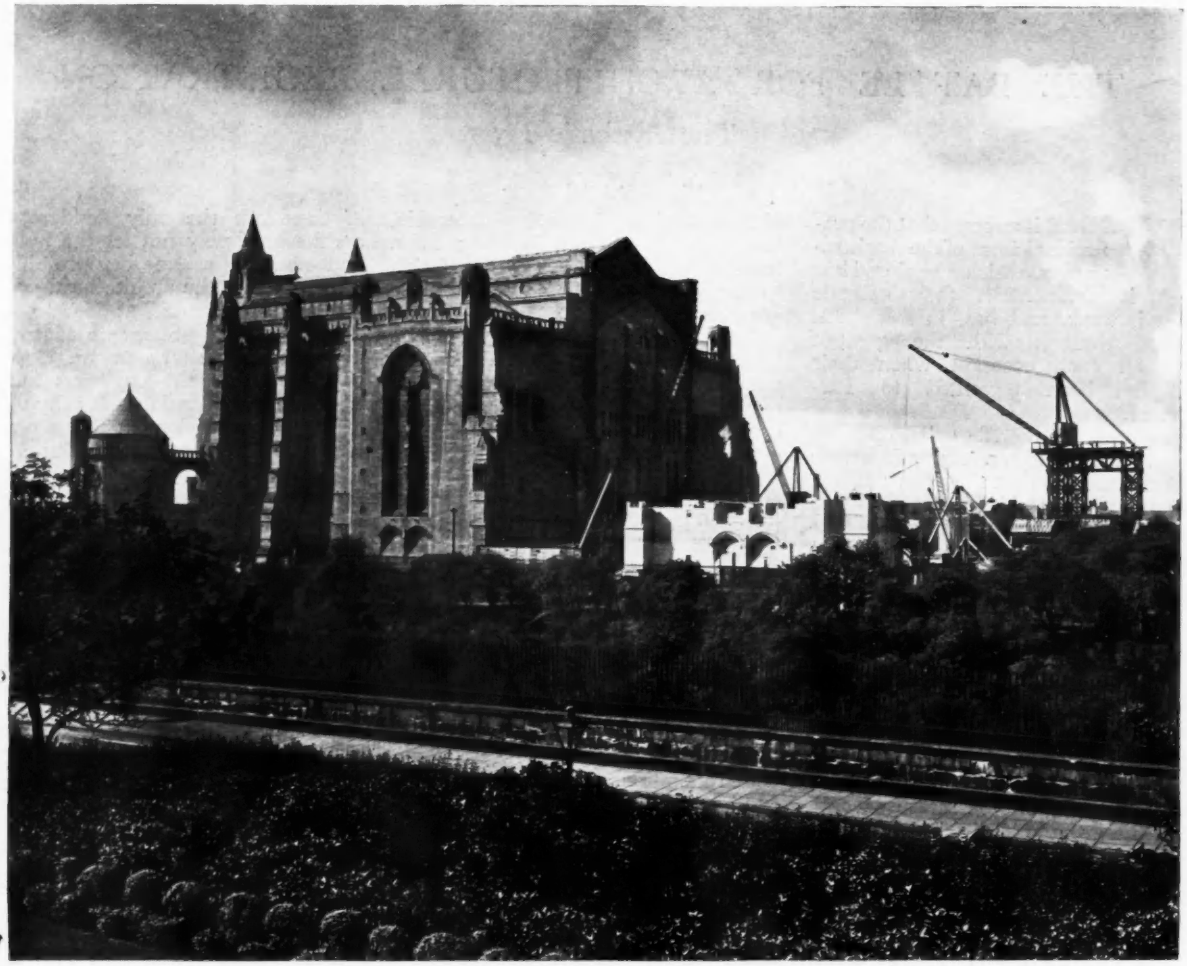
Let us for the present be content to say that architecture has an æsthetic element which the engineers fail to take into consideration. It is by virtue of this æsthetic element that architecture becomes an art. Some of us profess to know what this element is, and in so far as we have failed to convince our architectural brothers that the æsthetic element is capable of rational exposition, we share in the responsibility of the failure of the Registrationists to carry their Bill. Certainly the officials of the Royal Institute of British Architects, who have laboured so wholeheartedly to achieve Registration, are not in the least to blame if there does not exist in the ranks of architects themselves a sufficient degree of philosophic talent to persuade the public that the art of architecture has any existence at all. It might certainly be of advantage, however, if they were to recognize this philosophic weakness with which as a body we are inflicted, and plan their political strategy accordingly.

To make this point still clearer, let us suppose that a hundred or more novelists of acknowledged reputation were to urge that the public taste was being corrupted by a flood of stupid and vulgar novels, and that, therefore, all aspirants to the status of novelist should be compelled to undergo some kind of training in schools established or approved by the hundred superior literary men. The claim would appear preposterous unless these latter could establish a *science* of novel-writing and explain that they themselves conformed to its principles. For the same reason, until architectural design becomes a science, its exponents can have no official status in their capacity as artists.

For the purposes of Architectural Registration, then, let this be our maximum and minimum claim—that an architect is a person who is well trained in all *practical* matters connected with the design of buildings, and is pledged to conform to an honourable code of professional conduct. I believe that we can get Registration on these terms. But if we continue to make the larger claim we shall *not* get Registration; and we shall not deserve it.

(Concluded)

C



A general view of the Cathedral, taken a few weeks ago, and showing the walling of the new transepts rising alongside the completed portion.

LIVERPOOL CATHEDRAL:

What the Future

(*Sir Giles Gilbert*

BY PROFESSOR

I DO not think it is realized by the outside world how fast the great second section of the Liverpool Cathedral is rising from the ground. The present photographs show its state a month ago. Today it is some ten to twenty feet higher in parts. Standing on one of the great corner piers of the tower fifty feet above the ground—the pier itself is a platform as big as a large room—one sees rising on every side the vast piers and walls, the latter twelve feet thick, of the central space and of the second pair of transepts. Some of these piers are much higher still. One has just reached the springing of the nave arches, but none of the main arches is yet turned.

The whole thing looks uncommonly like the Baths of Caracalla in its immense scale and massiveness and in the absence of connecting arches. When this present section is built, there will only be left to build the nave, equal to the chancel in length but short, as naves go, in comparison with the size of the general structure, and the upper part of the tower. At the present rate it really seems as if some of us, and certainly the architect, might hope to see the finished building.

As one looks down on the work the peculiarities of the plan become very clear. One realizes the narrowness of the waist in the centre of the building where the two great internal porches impinge upon it between the pair of transepts. Narrowness, however, is a comparative term. This waist inside the walls is seventy feet wide—the internal width of the central tower. The great central area now being completed consists of this square, free of all piers, and of two similar spaces, nearly square, between each pair of transepts; making together an open central space 210 feet long. No solid building in the world has such an open vaulted hall, I imagine. We rightly pride ourselves here in Liverpool on St. George's Hall, with its great central apartment, barrel-vaulted in hollow bricks. Its dimensions, however, are considerably less than these, and its vault in comparison is a plaster ceiling.

It is this great heart of the Liverpool Cathedral—the chief novelty of its plan among similar structures—which is now being completed. When it is finished three thousand people will be able to kneel together in sight of the altar. Discussions are now going on as to the placing of the pulpit and whether indeed there should be one at all, whether, that is to say, an attempt



A view of the new works, taken, from aloft, expressly to illustrate one of the great porches biting into the centre of the structure.

THE SECOND SECTION

Scott, R.A., Architect)

May Hold

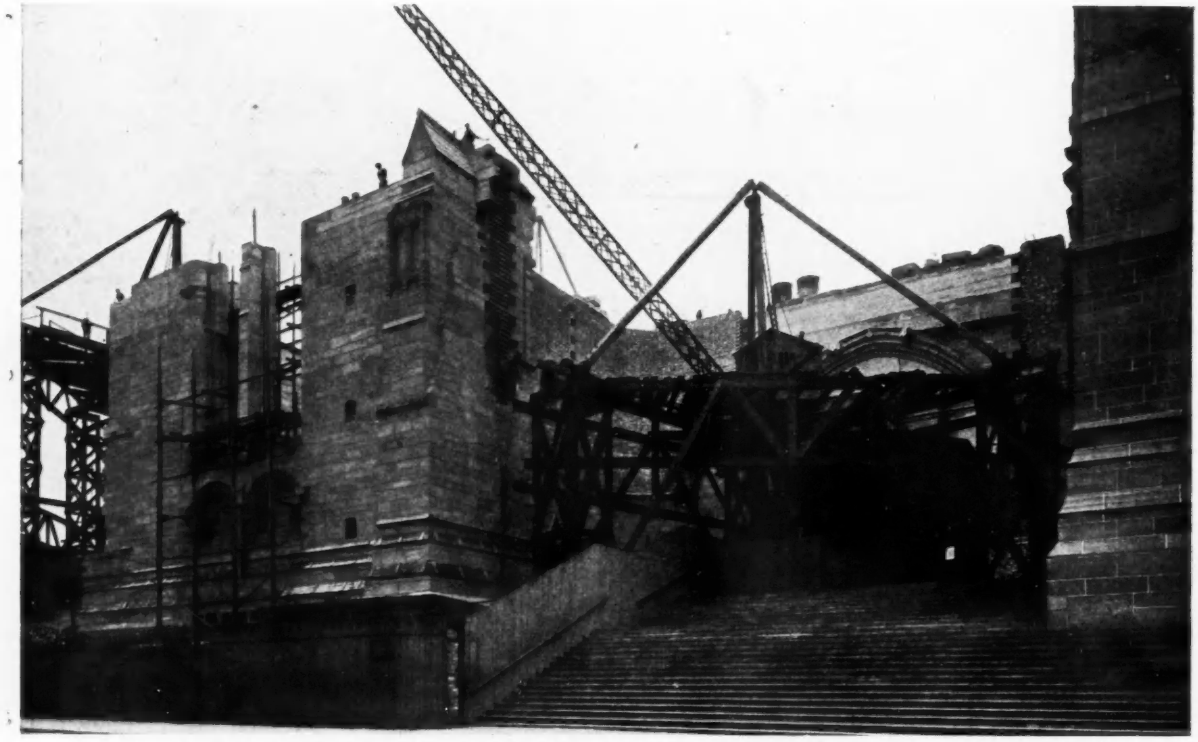
C. H. REILLY

should be made to preach to such a vast multitude, even with loud speakers. Canon Dwelly, the producer genius who designs and stage manages the services of the Cathedral, and who is now called in for all national ceremonials, is, I believe, thinking of four ambos, one at the base of each of the four great piers of the tower, and of a type of service with chant and response echoed back across the heads of the congregation from ambo to ambo. I mention this not as a settled fact, but to show how Sir Giles's great building is already awakening the imagination of all who use it. Its great spaces, its vistas and vast massive shapes will inevitably call forth fresh streams of creative imagination. This is the birthright of all great architectural ideas such as those which inform the main lines of Scott's cathedral.

Returning, like Simon Stylites, to our pier, and noticing again the great bites into the structure which the spaces between each pair of transepts and the central tower make on either side of the building, one realizes more than ever the significance of the great porches into which the architect is converting these spaces. They will soon have great arches, as big as any in the building, spanning them, and under these arches will mount great flights of steps seventy feet wide. Those on the river side, facing St. James's Road, are already in place, and lead up from a two hundred foot span of steps embracing both this gigantic porch and the two transepts. On these steps which make a great base to the building, and on the inner ones, with their fine dramatic value as they penetrate the porch, one can imagine a great congregation assembling, half in the open air and half under cover of the porch, and waiting patiently to receive the blessing of the bishop as he emerges at their head.

This south entrance (pseudo-south) must obviously be the main entrance to the cathedral; especially if the nave is set apart for special uses, as the new stone screen cutting it off from the central space suggests. One says "obviously" unless something still more dramatic happens, which I think must be in the architect's mind.

On the north side (pseudo-north) he has an exactly similar porch, seventy feet wide, and as dramatically approached by flights of steps. But where do these steps lead? At present, directly to the almost precipitous side of the quarry on the edge of which the



Up to the south porch, between the southern pair of transepts, lead spans of wide steps. The building is proceeding apace: the porch will soon be spanned by an arch as big as any in the building.

cathedral is built. Far down below is the valley of death, the old cemetery very mysteriously but very unhygienically placed in the bottom of the old quarry. Fifty yards away on the other side of the abyss rises a great Piranesi-like wall of rusticated stonework, with long sloping walks on its face leading to the arched entrances of burial vaults. Above is Hope Street—well named.



Liverpool Cathedral.] [*By Sir Giles Gilbert Scott, R.A.*

A view of work in progress, taken inside one of the new pair of transepts. The size of the arch may be appreciated by comparison with the figures of masons in the foreground.

The architect's idea is surely to throw a single span bridge—not too wide, for that might spoil the scale of his building—from this north porch across the void and then, one hopes, to pull down a horrid terrace of tall, yellow-brick houses and build at the other end of the bridge, facing the cathedral, the bishop's palace, the residences of the canons, the deanery, the clergy school and choir school, and all the other buildings attendant on a cathedral.

If this were done, not only would these deep entrances right into the heart of the structure on both sides be justified, but a more romantic approach would be given to the Liverpool Cathedral than has been dreamt of for any such building. Of course, nowhere else in the world but in Liverpool could such a dream come true! A city, however, which is building a cathedral like the present one, and is contemplating another even larger, is a city where anything glorious of this kind might happen. One does not want to boast of one's adopted town too much. It certainly does sufficiently inglorious things sufficiently often. Yet there is St. George's Hall, there is Sir Giles Scott's Cathedral and that of Sir Edwin Lutyens, fast taking shape. This bridge therefore, which, looking at the site and the architect's useless porch, must be in people's minds though they talk very little about it, is not too much to hope for—in Liverpool.



ENGLISH PRECEDENT No. 104

WHITE HART INN, NEWARK, NOTTINGHAMSHIRE

The building here illustrated is of special interest, inasmuch as it shows that the English genius for street architecture which flowered so splendidly in the eighteenth and early nineteenth centuries was beginning to find expression in the pre-Renaissance period.

In the delightful design of this inn we find that the gabled style has already been superseded, and the façade is given a horizontal emphasis. Particular skill is shown in the treatment of the row of windows beneath the eaves, which is a surprisingly early precursor of the wide continuous openings which "modernist" designers introduce in their façades.

The modern shopfront, although an unfortunate intrusion, is yet fairly reticent in its style, and does not destroy the main lines of the composition.

—[A. TRYSTAN EDWARDS]

JAGO *v.* SWILLERTON AND TOOMER

In the matter of the Arbitration Act, 1889

BY KARSHISH

This is an action before an arbitrator, brought by Colonel Jago, J.P., jointly and severally against builder and architect, for damages for the collapse of a village hall. Mr. Chawlegger, K.C., and a Junior represent the plaintiff; Mr. Twistle the defendant Swillerton, and Mr. Pitfall, K.C.—with him Mr. Wrackem—the defendant Toomer. Counsel concluded their closing addresses on behalf of their respective clients shortly before one o'clock on the third day of the hearing, and the arbitrator then said that he would consider his award and notify the parties to the action when it was ready for publication. Though the case related is true to life in every particular, the characters named are fictitious.

viii: The Award and Author's Commentary

WHEN Toomer, in saying goodbye to his solicitor, Bosson, at the end of the hearing, asked when, and in what papers, the award would be published, he received no answer; Bosson, as usual, being irritated by his client's inveterate simplicity. An arbitrator's award is "published" by being issued to the party to the action who pays for it. The arbitrator notifies the solicitor on each side, or, if none, the parties themselves, by registered letter that the award is ready to be delivered to any one of them on payment of "the costs of the award"—i.e. fees and expenses of the hearing. The solicitors of the parties may agree among themselves which shall take up the award, and usually the side most likely to have got the verdict does so. The party so taking up the award can recover from the others the proportion of the costs of the hearing and award, as determined by the award. The costs of the parties to the action, as well as costs of the award, are part of the award, the arbitrator having full discretion in this matter of costs and a lien upon his award until his charges are paid.

Unlike a judge's verdict, an arbitrator's award need not state the grounds for his decision, and therefore, wisely, never does so; nor need it state the terms of reference, and if it does so, and states them wrongly, the error will have no effect on the award, as it is held that fact outweighs a mere mis-recital. The award, after publication, is inviolable: not a letter may be altered except to correct purely clerical errors, and however erroneous it may be it will stand as final; there is no appeal from it except by proving fraud, interest in the subject-matter, and such like. The courts are very reluctant to interfere, and will in no case re-try an action. All the court can be moved to do is to cancel the award or refer it back upon the ground that it diverges from the submission, or exhibits a serious irregularity on the part of the arbitrator; but as the arbitrator is not bound by the strict rules of a Court of Law and, except as regards evidence, has a free discretion in the conduct of the hearing, little short of positive misconduct on the part of the arbitrator will afford sufficient grounds for upsetting his award. In fact, an Arbitrator's Court may be, with the exception of the House of Lords, a final and authoritative tribunal.

It is commonly said that a High Court verdict usually satisfies *one* of the parties to the action, but that an arbitrator's award usually pleases *none*; and this is true in the sense that an arbitrator generally has before him matters of accounts or of technical intricacies, so that his duties are rather those of apportionment than of legal niceties; and as he is not usually a lawyer—or if a lawyer is also a technical expert in a professional calling—he is more disposed to balance justice than to enforce the letter of the law. It is therefore not an altogether unjust criticism of arbitrators that they, at the opening of a case, assume an equal division between the parties of the matter in dispute, and then, while the case proceeds, take away from one side and add to the other as the evidence bears in favour of plaintiff or defendant.

An arbitrator is bound, unless he enlarges the time as by statute required, to publish his award within three months of entering upon the reference. It was five weeks after Bosson left Toomer standing upon the curb outside the front entrance of the Institute of Municipal Engineers, that Toomer heard from Bosson that the award was ready, and that he had arranged with the other side to take it up. He had the grace to enclose a copy of the arbitrator's notification, which was as follows:

In the matter of an arbitration.
Jago v. *Swillerton and Toomer.*

Gentlemen,

I hereby give you notice that I have made and published my award in writing respecting the matters in difference between Colonel V. F. Jago and Messrs. J. R. Swillerton and D. W. Toomer, referred to me; and that it lies in my office ready to be taken up upon payment of the charges, of which particulars are enclosed: they amount to £165.

Yours truly,
F. HOPETOUN GIZZARD,
Arbitrator.

On receipt of that letter Toomer, who had been on tenter-hooks, telegraphed to Bosson—"Reply paid. Please wire result directly known"; and received next day a handsome shillings-worth—"We have won congratulations Nobbos."

It is more usual for arbitrators to "consider" their award than for judges not to do so; and it is also usual for them to be in no hurry to publish unless circumstances make time of importance. However clear an arbitrator may be as to the award he will make, he is glad to meditate on it and test it from every point of view and, perhaps, discuss particular aspects of it with other technicians and lawyers: he will like to feel that his award is definitely a part of himself and an unchangeable fact for him, before he publishes it. In deciding this case of *Jago* v. *Swillerton and Toomer*, Mr. Hopetoun Gizzard undoubtedly had a devil of a time of it. This may well be imagined; but it is also shown by certain tortured sheets of foolscap, blotted, cross-noted, scored, ticked, corrected, amended and discarded in favour of other successive sheets, which shared the same fate in reduction to unintelligible scrawlings; till at last there emerges from the riot of indecision the statement tabulated on page 358, which, at first sight, might appear to be the record of a chess tournament, but which, in fact, is the arbitrator's final apportionment of losses and gains to the several parties on the various issues raised in the case. It may be imagined that Mr. Gizzard was at one time a cricketer addicted to score sheets and tables of averages. On the left of the sheet here reproduced the different issues are tabulated, and three pairs of columns show who, in the arbitrator's opinion, won on each issue: A. stands for *Jago* as against *Swillerton*, B. for *Jago* v. *Toomer*, and C. for *Swillerton* v. *Toomer*.

At the bottom of the sheet is

	A. J. *v.* S.		B. J. *v.* T.		C. S. *v.* T.	
1. *Vis major*	1	0	1	0	–	–
2. Maple ordered by plaintiff	–	–	1	0	–	–
3. Use of wedges=Negligence of defendants	0	1	0	1	0	1
4. Leaving in of wedges=Negligence of defendants	0	1	0	1	0	1
5. Common knowledge of propensity of maple	0	1	0	1	–	–
6. Architect definitely undertook lay satisfactory maple floor	–	–	1	0	–	–
7. Defendant's work defective	0	1	0	1	–	–
8. Maple a "novel material"	0	1	0	1	–	–
9. Buckling of floor directly flowing from wedges	0	1	0	1	–	–
10. Plaintiff gave defendants no opportunity of remedy	0	1	0	1	–	–
11. Dancing on buckled floor due to plaintiff's negligence	0	1	0	1	–	–
12. Factor of safety insufficient	–	–	0	1	–	–
13. Toomer should have warned Swillerton of propensity of maple	–	–	–	–	0	1
14. Synchronization of period=Negligence of Toomer	–	–	0	1	–	–
15. Collapse due to act of plaintiff	1	0	1	0	–	–
16. Collapse due acts of defendants	0	1	0	1	–	–
17. Penalty clause alive at time of collapse	1	0	1	0	–	–
18. Penalty clause dead at time of collapse	1	0	1	0	–	–
19. Architect liable under certificate of completion	–	–	1	0	1	0

scrawled—"(*a*) Negligence not made out. (*b*) If plaintiff had intended that defendant builder should be responsible for maintenance and keeping in repair he would have directed contract to be so drawn." By (*b*) the arbitrator indicates that he attaches importance to a point not particularly stressed by Counsel for the defence, namely, that as Swillerton's contract required him only to make good defects due to improper materials and workmanship appearing within six months of date of completion, he is not liable for anything more; and that if plaintiff had intended to hold Swillerton so liable the contract would have stipulated that he was to "maintain and keep in repair." By omitting to take this step plaintiff may be regarded as deliberately accepting all risks outside the making good of defects.

As Jago, in the arbitrator's opinion, failed to bring home negligence to the defendants, he had necessarily failed in his action; and many of the points logged in the table of scores—if it may so be called—have no importance except as they bear on the question of who shall be liable in costs. It is for the arbitrator to say whether each party shall pay his own costs; or one or more of the parties, the whole, or part, of the costs of the other or others. It is to be noted that the only points settled in Jago's favour are: (1) That *vis major* is not established; (2) That he did not order Toomer to lay American maple floor; (6) That the architect undertook to lay a satisfactory floor of American maple; (15) That he is not responsible for the collapse; (17) That the penalty clause of the contract was alive at the time of the collapse; and (19) That the architect is responsible to him for certifying completion. The only point decided against Toomer in favour of Swillerton is that *if* negligence had been shown Toomer was responsible for certifying the building as completed, so that Swillerton would have been exonerated from paying penalties for delay, and Toomer could have been sued. It is to be noticed that while the arbitrator finds that neither Swillerton nor Toomer were negligent in their duty to Jago in making use of blocks and wedges, and in leaving them in place, he finds for Toomer on the same issue as between him and Swillerton; that is to say, *if* negligence of defendants had been shown, it was Swillerton, and not Toomer, who, in the arbitrator's opinion, would have been liable to Jago in damages—less damages for delay which, by his negligence in certifying completion, Toomer had made himself liable for. This point, it will be seen, has effect in the award (page 359), which is neatly engrossed on thick foolscap paper.

It is to be gathered from the above that the arbitrator felt that, though neither of the defendants were guilty of negligence, the use of the wedges was entirely a matter for the builder's discretion and had nothing to do with the architect; and therefore, since the whole trouble arose from the builder's error in judgment, it was not fair that the architect should be mulcted in the costs in which that error in judgment involved him.

The meaning of the award is that Toomer will pay none of the costs in which the action has involved him except his own time and expenses, including out-of-pocket expenses, travelling, hotel, etc.; and except a small proportion of his solicitors' charges and disbursements. The taxing master, for instance, might not allow as costs that 9d. for taxi from Carey Street to the Temple charged up by Bosson, on the ground that he could have walked. Swillerton will pay only the same and, in addition, his own and Toomer's costs—as assessed by an official taxing master, to represent the proportion of costs due to matters in dispute between Swillerton and Toomer—plus the five pounds which the arbitrator in his award has decided to represent the costs of the award in respect of those matters. Everything else—costs of award, fees (retainers and refreshers) of Counsel for all parties and all solicitor's charges of all parties, and expenses and disbursements to witnesses, together with money paid to compensate persons damaged by the collapse and cost of reconstruction—will be paid, except as the taxing master may disallow, by Colonel Vivian Fanshawe Jago, J.P., of Grastopen Manor, in the County of Midshire, Justice of the Peace, who may be said to have fairly "got it in the neck"; and I—who have followed the ramifications of the action with detachment, favouring no one and doing my best for each side in turn by endowing Counsel, for and against, successively with every logical dexterity and quibble I could muster—welcome the award with delight.

I wanted Toomer to win and I believe that the same sentiment found place with most readers—but why? Why should anyone—least of all architects, and I last of any—wish Toomer to win? Like Mrs. F.'s aunt, I hate a fool; and Toomer is one. He is also underbred, ill-educated, a dull, ignorant, flabby fellow deficient in grit; an interloper who is almost an impostor and who has the further disgusting attribute of being an aggressively "worthy" man. From first to last he did nothing to help himself, and, however strong his case might have been, he deserved to lose it by his invertebrate, nerveless idiotcy in the witness chair: yet, in spite of all this, I should have felt real distress if the old ass had lost his case; and I have no doubt whatever that any readers who have been interested in the narrative would have shared my disappointment. Toomer, however, is an entirely honest man: there is not a scrap of malice in him and, apparently, no vanity; his stupidity is closely related to a simple nature which is a lovable trait, and, on the top of all, he is made to suffer unfairly. For Bosson I will say this: that I would at any hour of any day or night gladly hire a taxi and go from one end of London to the other to avail myself of the privilege—if it were accorded—of taking a running kick at him from behind.

When Jago first answered to his name and sat in the witness chair, I thought he was the traditional country gentleman, and I sympathized with his quickness to resent Counsel's methods in cross-examination: but Pitfall soon gave me very different ideas about him which, everything considered, were not very far from the truth; and the episodes of the rectory rubbish heap and the church pew stamp Jago, in my opinion, as a swaggering cad and

probably, also, a member of the great "aow waow waow" brigade as well, and I was delighted when he overstepped the mark and was forced to truckle, and to eat humble pie, in order to hear his own Counsel's address in his behalf.

Swillerton seems to be an honest man and a dependable builder, but he, also, is a kind of interloper, for he is almost illiterate and it is clear that his field of activities lies in the purlieus of the provincial suburb and is regulated by its shoddy customs. The man seems to be outside the fine craft-tradition of the best old provincial firms, and to have no knowledge of right good building methods. He dropped exactly into his place when he described himself as "builder and carting contractor." He is not the sort of man that an educated architect would be likely to employ—which is perhaps exactly why he suited Toomer.

I need hardly say that Pitfall is the man for *my* money. I thoroughly like old Chaw—through and through I like old Chaw—but in Pitfall I rejoice: his agility, his witty resource, his impish power of ridicule, have been a pure delight. My own idea is that it was Pitfall, alone, who won the day for the defendants; and when Polechat told Bosson in consultation that "we may get hit to the extent of a ten pound note," I thought, and still think, he was unduly sanguine. Chawlegger's address struck me as dangerous: it disturbed me with grave doubts whether, after all, Toomer would get the award; in fact, Chawlegger is a bigger man than Pitfall—sorry as I am to think it. How he would be able to answer Pitfall I had no idea: but he did it in his stride, and completely, by the device, it will be noticed, of *not* answering Pitfall. What he did was to lay down his own foundation and build a different edifice with new points of view cemented with broad principles rather than with niceties of law; and this edifice came near to overshadowing that erected by his learned friend and might have won the acceptance of any arbitrator less independent and firm-minded than Gizzard.

We may feel sure that the decisive, unequivocal character of the award owes to the fact that Gizzard was a trained lawyer in addition to being an architect and surveyor. There is a tendency to sloppiness in the awards of arbitrators who are not lawyers: in the present case such an arbitrator might, indeed, have found negligence not proved, but, realizing the question to be a nice one, he might have directed defendants to pay their own costs with their share of costs of the award, and even awarded *part* damages against them on the muddled principle that, though they were not really negligent, they ought not to have been so negligent as they were. Any lawyer would realize that if there was *not* negligence, the plaintiff's claim must fail; if there *was*, it must succeed.

One strange aspect of actions at law is well brought out in this Jago business, namely, the diversity of sound, but contradictory, views that can be urged in support, or in destruction, of matters of which the facts are admitted and their interpretation fixed by the previous decisions of judges in parallel cases. For instance, in *Jago*, one Counsel claims as a precedent that the failure of a novel material does not necessarily involve the architect in negligence; and his learned friend another — namely, that the architect has no right to experiment with novel materials at the risk of the building-owner. The essential question of course is — Which category applies?

Jago seems to have been ill-served by his solicitors, who ought never to have

---

BE it known unto all peoples to whom these presents shall come, I Ferdinand Hopetoun Gizzard, Fellow of the Royal Institute of British Architects, Barrister-at-Law, Member of the Inner Temple, of 5 Midden Court Inner Temple in the City of London SEND GREETINGS:

WHEREAS by an agreement dated the 27th day of February 1927 made between (Colonel) Vivian Fanshawe Jago, Gentleman, of Grastopen Manor, and John Robert Swillerton, builder, of Nollingborough, and David Winkletop Toomer, Architect and Surveyor, of Nollingborough, it was agreed to refer to Arbitration all matters in dispute arising out of the building of Grastopen Village Hall; and WHEREAS differences and disputes have arisen concerning the responsibilities of the parties jointly and severally for the collapse of the said Grastopen Village Hall; and WHEREAS the said parties being unable to agree to the nomination of an Arbitrator referred that nomination to the President of the Royal Institute of British Architects under the powers conferred in that extremity by the above cited agreement; and WHEREAS the President of the Royal Institute did nominate and appoint me as Arbitrator to decide the said disputes and I accepted the nomination and appointment—

NOW KNOW YE that I, the said Ferdinand Hopetoun Gizzard aforesaid as Arbitrator have taken upon myself the burden of this reference and having heard the witnesses of all the said parties and having weighed and considered the several allegations of the said parties and also the plans diagrams vouchers and documents that have been given in evidence before me, do hereby MAKE and PUBLISH this MY AWARD in writing of and concerning the matters above referred to me, in manner following, that is to say: I AWARD AND ADJUDGE that neither of the Defendants jointly nor either of them severally is liable in damages to the Plaintiff and that the Plaintiff fails in his action to recover damages from the Defendants.

I do FURTHER AWARD AND DIRECT that the Plaintiff do pay to the Defendants severally the whole of the costs incurred by the Defendants of and incidental to the reference and award in the whole of the matters in dispute between the Plaintiff and the Defendants excepting as below as between party and party. AND I FURTHER AWARD AND DIRECT that the Defendant Swillerton shall pay to the Defendant Toomer the whole of the costs incurred by the Defendant Toomer of and incidental to the reference and award in the whole of the matters in dispute between the Defendant Swillerton and the Defendant Toomer as between party and party, and I FURTHER AWARD AND DIRECT that the sum to be paid by the Defendant Swillerton as costs of the award shall be Five Pounds sterling and I FURTHER DIRECT that he the Defendant Swillerton shall not recover from the Plaintiff the whole or any part of the costs which I have by this my award directed to be paid by the Defendant Swillerton to the Defendant Toomer, nor of his own costs incidental to the matters in dispute between him and the Defendant Toomer.

IN WITNESS my hand this 19th day of January 1928.

FERDINAND HOPETOUN GIZZARD.

Signed in the presence of:
Herbert Kitchener Cox,
Practical Window Cleaner,
97 Asquith Villas,
Glue Lane, Hackney.

called Mr. Padrig O'Hara or the egregious archipigkeeperteet as witnesses. Pitfall made great profit out of the former, and so handled the latter that he got from him as much support as any of his own witnesses gave him. Chawlegger, of course, had never seen these witnesses before they confronted him in the witness chair, or he would probably have secured the testimony they gave from some other source. Toomer was the only bad witness Pitfall had; but Toomer's exhibition of honesty, carried to the point of idiotcy, probably did him little harm with such an experienced, level-headed arbitrator as Gizzard. Randegger was certainly a splendid witness: it would be difficult to imagine an expert witness better equipped in principles, and power, and firmness of character than Randegger; and though, as the arbitrator objected, his method of protest against Counsel's devices of cross-examination was "deplorable," it seems to me that he was perfectly justified in insisting on the dignity of his calling and in fighting Counsel with his own weapons. Randegger is obviously a man of known attainments entitled to respect, and the arbitrator was naturally reluctant to enforce his authority as he did with the carpenter; but I fancy Randegger would have found himself turned into a cell to cool off for an hour or two if he had attempted to carry things to such lengths with a judge of the High Court. However, Randegger probably understood that, perfectly.

Thus ends the narrative of the famous cause of *Jago* v. *Swillerton and Toomer*; BUT—— as the film captions say ——

(NEXT WEEK—IX: THE AUTHOR JUSTIFIES HIMSELF—CONCLUSION)

SWANSEA CIVIC CENTRE COMPETITION

The Winning Design: By Ivor Jones and Percy Thomas

MR. HENRY V. ASHLEY, the assessor of the competition, promoted by the Swansea City Council, for designs for the new civic centre, made his awards as follows:

First place, Ivor Jones and Percy Thomas, Cardiff. (£750.)

Second place, D. H. McMorran and Arthur Bailey, Harrow-on-the-Hill. (£500.)

Third place, V. O. Rees, London. (£300.)

Fourth place. C. Wyville Home and Shirley Knight, London. (£200.)

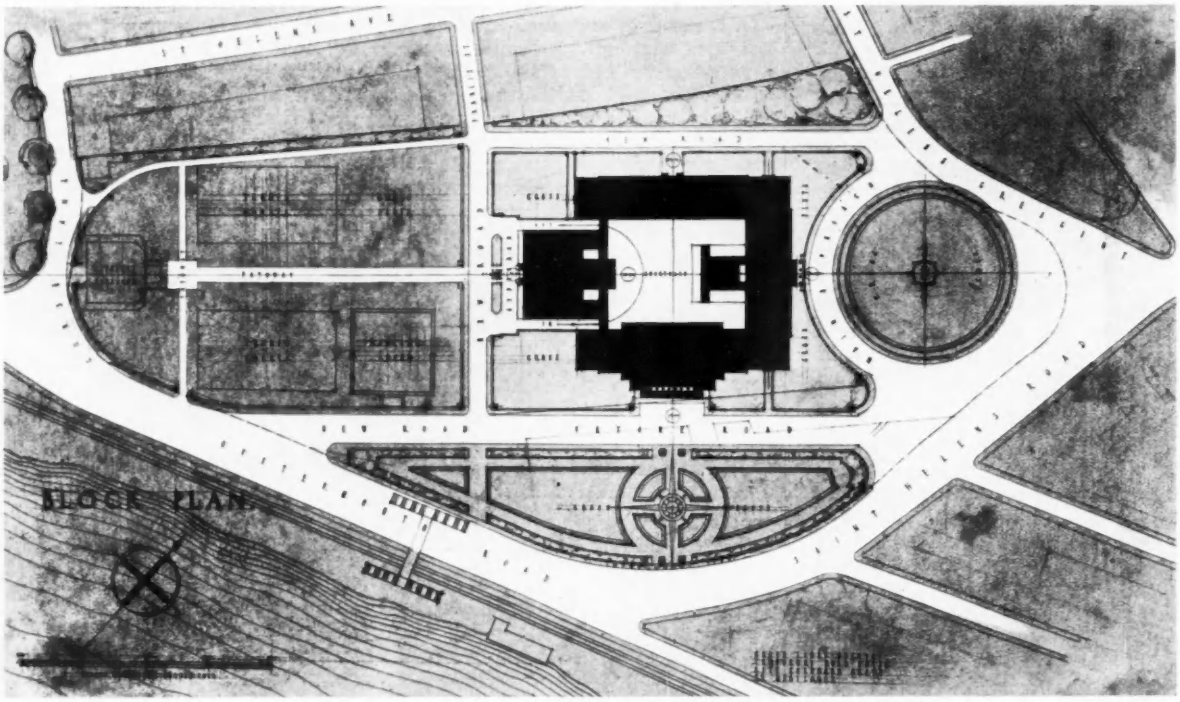
The designs of Crouch, Butler and Savage, of Birmingham, and Eric Hayman, of London, were commended.

There were seventy-one competitors.

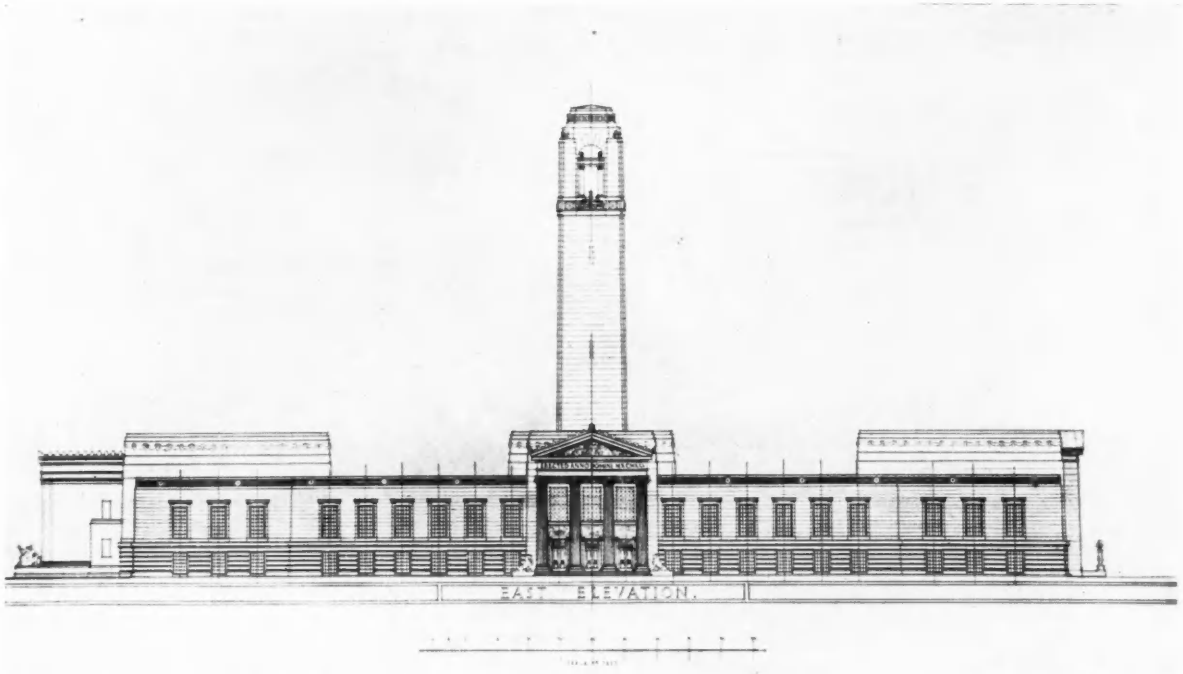
Following are some critical notes on the winning design:—

Messrs. Ivor Jones and Percy Thomas have submitted plans which are of such conspicuous merit that they could scarcely be improved upon. As is usual in architectural competitions, we find that the winning design has a substantial measure of symmetry. There seems no reason to quarrel with this convention, provided that the true expressiveness of the architectural "programme" is not sacrificed thereby. To balance an assembly hall with a block of municipal offices, for instance, as if these two elements were exactly comparable, would not only have been an error in architectural expression, but would probably have resulted in a certain artificiality of planning, in a striving to place a number of rooms within a rectangle of pre-determined shape, and perhaps not the best shape. In the Swansea Civic Group, however, Messrs. Jones and Thomas have succeeded in giving to the four main parts of the building, namely, the council chamber with mayoral suite, the municipal offices, the assembly hall, and the law courts, just the right mutual inter-relationship, for the individuality of none of them is sacrificed, while together they comprise an orderly composition.

In next week's issue of this JOURNAL we shall illustrate a number of the plans



Block plan of winning design. The scheme comprises, on the north (actually north-west by the compass) and east sides, municipal buildings; on the south front, an assembly hall; and on the west, law courts.



Swansea Civic Centre Competition : The Winning Design.] [*By Ivor Jones and Percy Thomas.*

The principal (east) elevation. Immediately beyond the main entrance are the council suite and chamber. To the left, on the lower ground floor, is the borough treasurer's department and, to the right, the health department. The tower rises over 100 ft. above the roof of the buildings.

submitted by other competitors, and it will then be realized how few of them have visualized the problem so clearly as the winners.

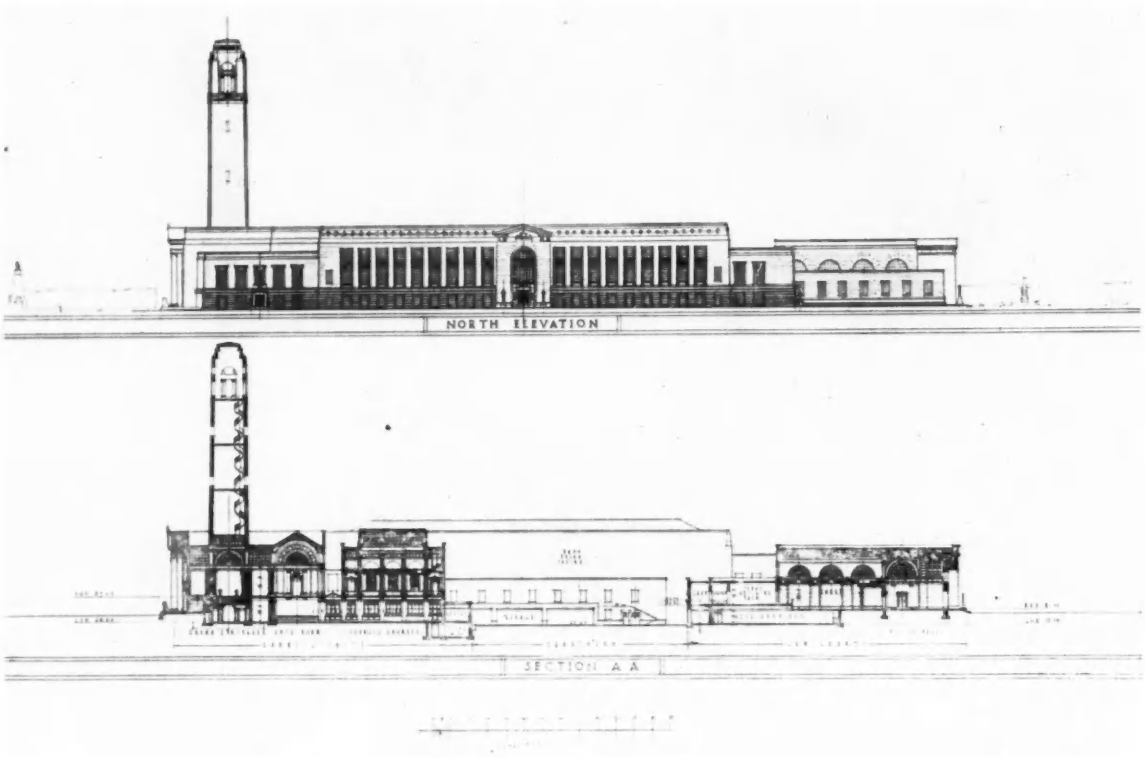
The civic group here illustrated has entrances at the centres of the east, south, west and north sides, and the position of these entrances was the occasion for four separate symmetries in the elevations, all of which are highly expressive of the different functions of the building. Let us take the east elevation first, as this is the most important. The entrance here gives access not only to the council chamber and mayoral suite, which are approached by a grand staircase, but to the municipal offices, the rates department of which is situated underneath the council chamber. Immediately above the vestibule is a tower. A feature of this kind was clearly indicated in the conditions, and in this matter the assessor was perhaps influenced by the example of Southampton, where, it will be remembered, the winning design showed elevations for a civic group in which the most conspicuous feature was the roof of the assembly hall.

On the occasion on which he visited the Public Gallery where the numerous schemes for the Southampton Town Hall were exhibited, the writer naturally asked the policeman on duty what he thought of the winning design. He expressed his profound dissatisfaction with it in one respect, for he said that a town hall ought certainly to have a tower. Of course, the policeman was right, and it is noteworthy that his profound æsthetic judgment soon afterwards found support in official quarters, and the Corporation of Southampton requested Mr. Berry Webber to amend his design and introduce a tower.

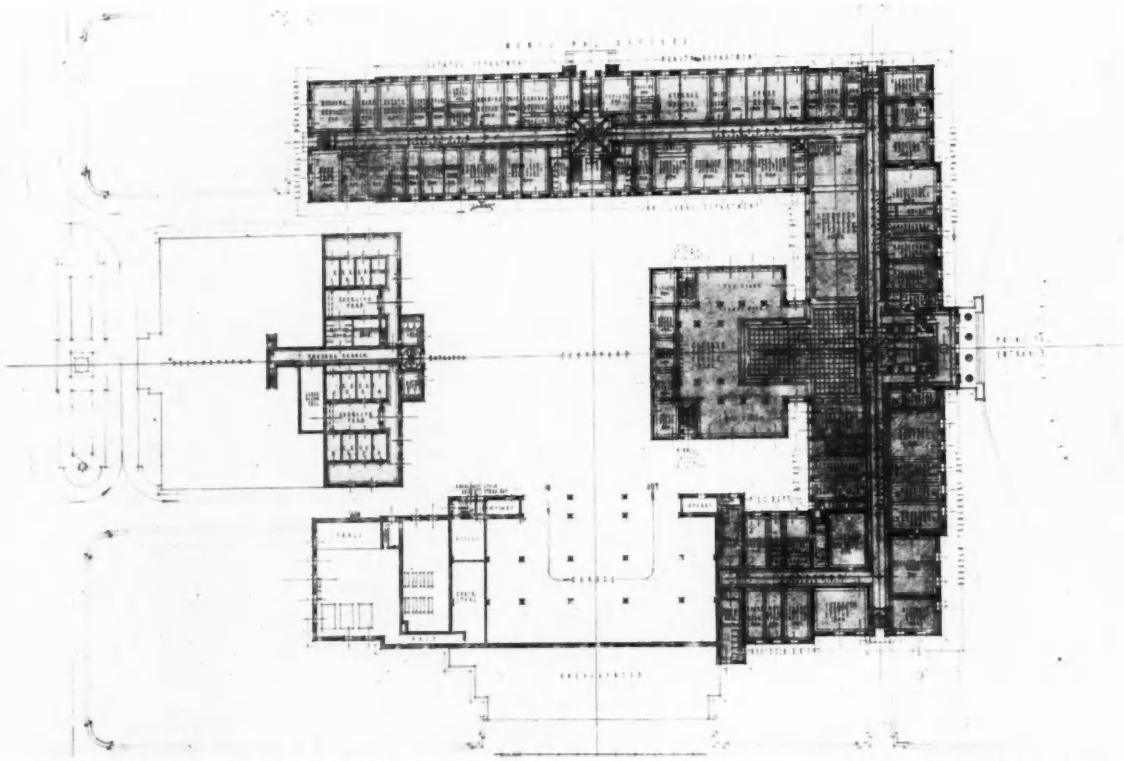
A point here arises which is worthy of consideration by those who are entrusted with the task of formulating the "programmes" for architectural competitions. Whereas in the present instance the assessor definitely asks for a tower, some indication should be given concerning the amount of money which the promoters of the scheme are prepared to spend upon such an ornamental feature. If the competitors receive no guidance in this matter and are, moreover, under the obligation to provide a very large number of rooms of specified floor areas for a limited sum of money, the tendency will be to pursue the ideal of economy with such persistence that the tower will suffer in consequence. It is perhaps better to have no tower at all than to have one that looks like a factory chimney. Yet if the competitor takes the risk and designs a tower such as he himself thinks would be worthy of the architectural occasion, he may find that his design is turned down on the score of extravagance.

Without contending that the tower here illustrated is comparable to a factory chimney, one may nevertheless suggest that it does express a certain parsimony which accords ill with the conception of a great civic group of buildings. It may be hoped, therefore, that when the scheme of Messrs. Ivor Jones and Percy Thomas is put into execution, the Corporation of Swansea will be sufficiently generous to provide a little more money, such as would enable the architects to broaden the tower or otherwise make it look more important and ceremonial. As at present designed, the tower seems somewhat oddly placed behind a pediment, for one naturally asks how it comes about that the portico or doorway is required to give access to the base of a tower which is narrower than itself.

In the case of the other elevations, no such difficult problem of composition arises. The grand colonnade in front of the assembly hall is highly effective, and the north front of the municipal offices is also imposing and dignified. The law courts section, although its façades are lower than the rest of the building, takes its place harmoniously in the group. The virtues of the plan are self-evident, and one cannot help being struck by the admirable communications between the several parts and the degree of economy which has been achieved. In the lay-out also, it will be observed that in a site which offered many difficulties, the traffic requirements are well considered, and the environs of the civic group have been vested with the requisite formality. From the practical point of view, this scheme has the great merit that the three sections—the municipal group with council chamber and mayoral suite, the assembly hall, and the law courts—can be built as separate contracts. It is understood that the Swansea Corporation intend to proceed with the municipal blocks, that is to say, the north and east sides of the quadrangle, at the earliest opportunity.

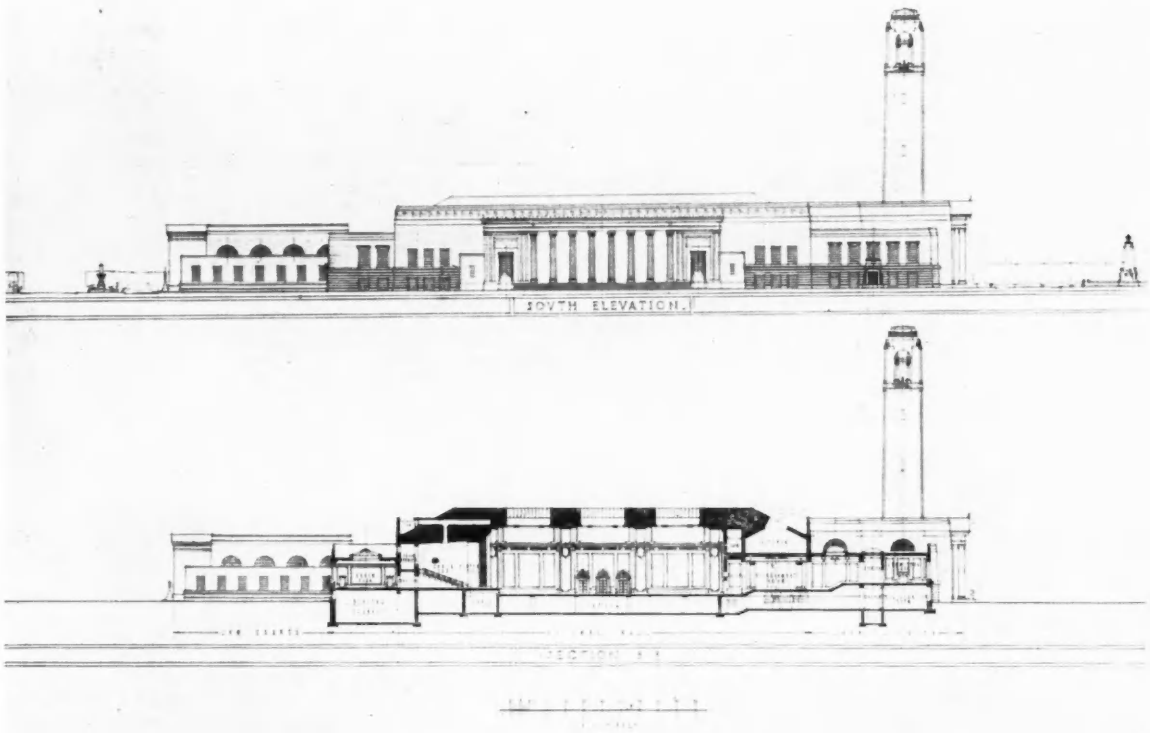


North elevation and section. In this wing are the town clerk's, education, estate, health and electricity departments.

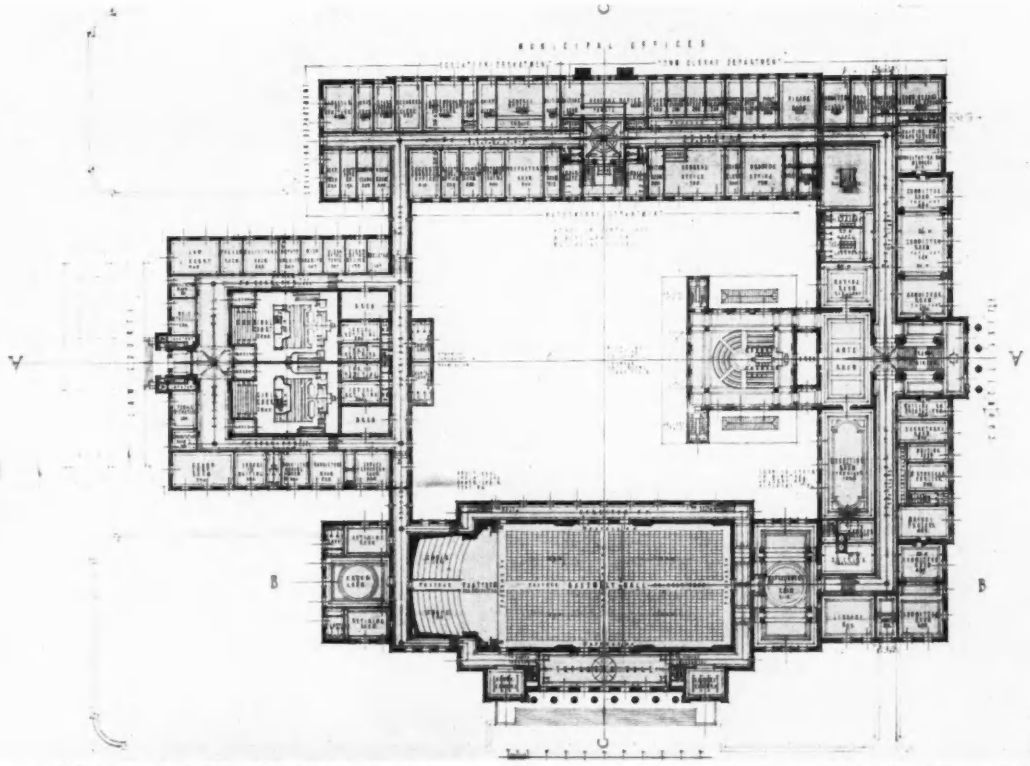


Swansea Civic Centre Competition: The Winning Design.] [*By Ivor Jones and Percy Thomas.*

On the lower ground floor, in addition to various municipal departments are the general rates office, the garage, and prison cells.



South elevation and section. The porticoed central entrance leads to the assembly hall, beneath which is a garage for forty cars.



Swansea Civic Centre Competition: The Winning Design. [*By Ivor Jones and Percy Thomas.*

On the upper ground floor are the assembly hall, the council chamber and suite, and the criminal and civil courts.



The south or main entrance front as it is today. As will be seen, the columned entrance, the zinc verandah, the sash windows of the 1830 incarnation, have been swept away.



The south or main entrance front of the hall, which is in close proximity to the church, as it appeared in the year 1919. It had undergone considerable alterations from time to time, not without prejudice to the stability of the old oak framing.

LITTLE BARDFIELD

REDESIGNED

THIS house, of half-timber construction, built in the sixteenth century, near Braintree, Essex, had been altered considerably from time to time until it had almost lost its original character, although retaining its proportions.

The entrance front was altered about 1830 by the insertion of sash windows, the addition of columns each side of the front entrance and a zinc verandah, and although this was carried out with considerable skill, the original oak framing was so weakened in the process as to endanger its stability after a period of years.

When the present owner, Mr. S. E. Letts, embarked upon certain additions and general reconditioning of the structure, he decided to revert to the original plan and elevation in so far as evidence could be found, or was available, and bearing in mind modern conditions and requirements.

Considerable time, care and trouble



The garden front. The process of reconditioning has been carried out in a spirit of faithful observance of tradition: the external modelled plaster work is in the Essex manner.

HALL, ESSEX

BY A. V. HEAL

was given to every detail and the entrance front, as restored, is believed to follow the lines of the original house, as also do the internal finishings.

The dining-room wing, facing the garden on the north side, was added where a wing had previously existed.

To give privacy to the entrance front, which faces south, the entrance courtyard was enclosed as a walled garden and considerably adds to the amenities and interest of the house.

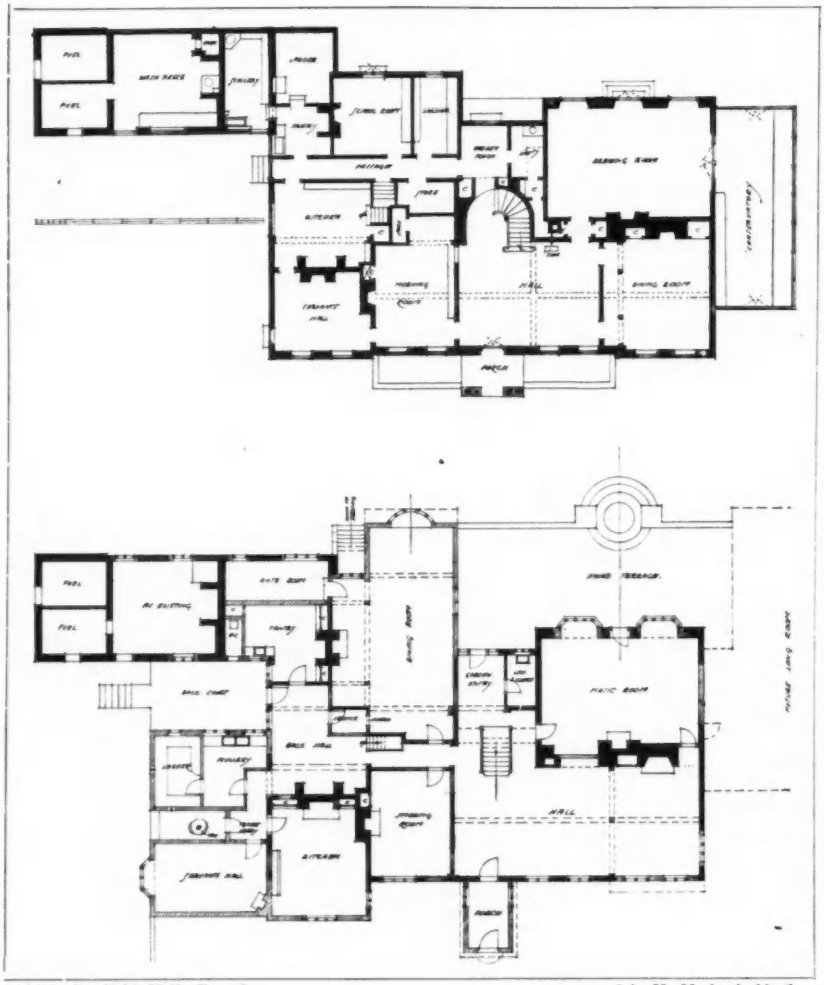
The external modelled plasterwork has been carried out in the Essex manner, which might well be followed in these days of concrete surfaces; the ever-changing effect of light and shade on this old English surface treatment is quite delightful.

Numerous bathrooms were embodied in the replanning, and central heating, hot-water domestic supply and electric lighting were put in.

The work covered a period of years and was carried out in sections.



The hall as it now is. The plans reproduced on the next page show that the part where the observer is standing was formerly a dining-room. Another dining-room has been built elsewhere, and the space has favoured the formation of a fine room.



Little Bardfield Hall, Essex.] [*A. V. Heal, Architect.*

Ground-floor plans of the house, illustrated photographically on the preceding two pages, before and after the reconstruction. In the new (lower) plan the old work is shown in black.

LITERATURE

BUILDING CONSTRUCTION

THIS publication is the fourth edition of a book prepared in the first instance by Brysson Cunningham, D.SC. The fact that it has passed through three editions shows that it has been appreciated and has found a definite use in students' libraries.

The present edition has been revised and prepared by Mr. Frank H. Heaven, A.R.I.B.A., whom we congratulate on the good quality of his new sketches and diagrams and on the thoroughness with which he has revised the reading and pruned the old edition of its obsolete matter.

The chapter on tools, plant, and appliances is sound, concise, and well-illustrated, and the general knowledge conveyed will be very helpful to students.

Concreting is given a prominent place, and its preparation, uses, particular applications and the form work necessary for placing are described and efficiently illustrated.

The weakest chapter in the book is that which deals with forces, namely, Chapter XI. The matter presented is good, but the attempt to convey fundamental ideas, in fifteen pages, of graphics, bending moments, moments of resistance and ideas of the strength and selection of beams and columns, is not to be recommended. It is not of real help to a reader, because there is no possibility of carrying the instruction far enough to be useful or even intelligible to the average student.

The authors fall into the usual error of presenting the methods of finding the stiffest and strongest beams which can be obtained out of a round log of timber. The theory is correct, but it is doubtful whether any log was ever converted in practice with the given objects in view. The matter is only of interest to mathematicians.

In spite of the objection to the few sections referred to, there is a mass of excellent information, numerous questions for practice attached to each chapter, and a good index. The book covers the elementary parts relating to construction in all sections of the building trades, and it is quite modern in its conception. F. E. DRURY

First Course in Building Construction. By Brysson Cunningham D.SC., and Frank H. Heaven, A.R.I.B.A. University Tutorial Press, Ltd. Price 5s. 6d. net.

LA SCIENCE DES PLANS DE VILLES

MESSRS. A. REY, PIDOUX AND BARBE have succeeded in putting together all the existing documents on the art of laying out plans, and in making an interesting encyclopædia of all the faults one is apt to fall into while town planning. Their intention, they say, is to study in a scientific and practical way all things concerning the extension of a town, and the best conditions under which a city should grow. The first and final condition, the centre-point where all efforts must tend, is health; and, according to Mr. Rey and to most people, health is nothing else but sunshine, light. The architect must therefore above all things consider the *insolation* of the house he is about to build.

Mr. Rey would like all houses to be situated on a "heliothermic" axis, on what he calls the direction in which one gets the best sum of health out of the product of insolation by heat. This is a fine idea, but is it practically possible to have every house in a town, the ideal town, Ηλιοπολις, oriented along this life-line of sun?

Mr. Rey is an enemy of high buildings, for skyscrapers mean a virtual slide towards the North, as the sun is capable of reaching only a small portion of the building, and life in it therefore is subject to a colder atmosphere.

Insolation happily is not the only "leitmotiv" of the book: one finds every problem studied in connection with town-planning, not merely in a synthetic way, but in the light of past experience. But, alas, science is often ineffective against reality. It is no use saying that a town must have wide avenues, planted with trees, and have long green areas so long as there are men who buy and sell land, who build and destroy houses, and who always try to make the most out of the least, without caring for the best.

One can only regret that some of the photographs are not more up to date.

J. E. F. DE LUNE

La Science des Plans de Villes. By A. A. Rey, Justin Pidoux and Ch. Barbe. 1 vol., 500 pages, 449 illustrations. 175 francs. Dunod, 92 rue Bonaparte, Paris 6.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

[*For special report of the Charing Cross Bridge Scheme, see page 345.*]

THE rejection of the Bournemouth-Swanage Motor Road and Ferry Company (Bridge) Bill was moved in the House of Commons last week by Mr. Glassey, a Liberal member, who said that the measure proposed to substitute for the present chain ferry across the beautiful Poole harbour a huge bridge of steel and concrete, costing £200,000, to the hindering of shipping and the disfigurement of the landscape. It was difficult to find words to describe the hideousness of the work that it was proposed to erect on a spot famed for its beauty. There was talk of covering that glorious heath-land and those magnificent hills with bungalows. That would be a crime. The bridge was not needed for traffic, and would cause permanent local unemployment.

Mr. J. H. Thomas, the Lord Privy Seal, also opposed the Bill.

Sir M. Conway said that if they opened up a piece of land today they necessarily spoilt its beauty, and because this bridge proposed to open up for development a beautiful piece of country in the neighbourhood of the lovely village of Studland he would vote against the Bill.

The Bill was rejected by 155 votes to 120.

At question-time, Mr. Wardlaw-Milne asked the First Commissioner of Works whether he had received any representations regarding the undesirable character of certain of the alterations now being carried out in the Royal parks, and whether he was aware that the alterations now being made go much farther than was originally intended and announced to this House.

Mr. Lansbury said he had received representations both for and against the schemes which were being put in hand for providing increased facilities for recreation in the Royal Parks. The only addition since last November was the provision of a running track on an outlying piece of ground at Regent's Park.

Replying to further questions, Mr. Lansbury said that no tree had been cut down in Hyde Park or Kensington Gardens in connection with these schemes. One tree was cut down on the site of the boating pond in Regent's Park, but this would have had to come down in any case very soon. His department was compelled to remove from time to time from the parks a considerable number of decayed and dangerous trees. The removal of such trees recently seemed to have given rise to some misapprehension as to the object of the work. Several fresh trees were planted for every one which had to be removed.

Asked by Sir William Davison and other members whether he had in mind the erection of any buildings or pavilions either in Hyde Park or Kensington Gardens, or any alterations in their layout; and whether he could assure the House that no such buildings or alterations would be put in hand without particulars being first submitted to the House of Commons, Mr. Lansbury said he was satisfied that the structures which were to be erected would not detract from the beauty of the parks.

Major Colville asked the First Commissioner of Works if the plans for the buildings on the Calton site in Edinburgh were ready for submission; and if it was his intention to have a model of the proposed building prepared.

Mr. Lansbury said that plans were practically ready for submission, and the model, which was in course of preparation, would be ready early in March.

Mr. T. Griffiths asked the Minister of Health if he would furnish a return showing, monthly from January, 1928, to the latest convenient date, for England and Wales, the average prices of non-parlour houses and parlour houses respectively, included in contracts let by or in direct labour schemes of local authorities.

Mr. Greenwood said the statement (reproduced on this page) gave the desired particulars for each month from January, 1928, to January, 1930, inclusive.

Sir John Power asked the Minister of Health what steps he was taking to deal with the situation caused by the decrease in the building of houses which had occurred during recent months.

Mr. Greenwood said he could not accept the statement as to the present situation. The number of houses completed under the 1924 Housing Act in the last quarter of 1929 was 14,507, as compared with 12,661 in the same period of 1928; and the number of houses under the same Act authorized in the last quarter of 1929 was 19,824 as compared with 11,692 in 1928.

Mr. Simon asked the Minister of Health whether he had any reports which would enable him to give the superficial area and the rents of the municipal houses built in Vienna during the last ten years; and whether he proposed to take steps to secure the building of similar houses at similar rents in this country.

Mr. Greenwood said that the answer to the last part of the question was in the negative. The conditions in this country and in Vienna were not comparable. The standards of accommodation provided in the Viennese schemes fell considerably below those thought necessary in this country. About 75 per cent. of the tenements consist of a kitchen and one room, and had an area of from 400 to 450 square feet. The rents were based only on maintenance costs, and took no account of capital charges.

Mr. Greenwood said that although figures of average annual loss on slum-clearance schemes had not in any case been fixed, the final accounts showing the capital cost of several of the completed schemes had been made up and estimates had been made of the probable average annual loss on the basis of present rents and on certain assumptions as to the selling price of the cleared sites. These estimates showed, as regarded ten completed schemes under the Housing Act, 1923, for which accounts had been received, an annual loss of about £2 per person displaced from slum areas.

Average Prices of Non-Parlour and Parlour Type Houses.

Month.	Year 1928.		Year 1929.		Year 1930.	
	Non-Parlour Houses.	Parlour Houses.	Non-Parlour Houses.	Parlour Houses.	Non-Parlour Houses.	Parlour Houses.
	£	£	£	£	£	£
January ..	389	437	341	422	321	434
February ..	356	430	344	393	—	—
March	365	445	336	420	—	—
April	378	431	348	401	—	—
May	372	445	344	406	—	—
June	356	426	355	404	—	—
July	366	434	337	377	—	—
August	349	417	348	409	—	—
September ..	365	429	347	423	—	—
October ..	369	427	344	419	—	—
November ..	354	417	341	427	—	—
December ..	338	429	370	404	—	—

LAW REPORT

PUBLIC HEALTH ACT, 1925—AN IMPORTANT DECISION

Attorney-General v. *Sunderland Corporation. Court of Appeal. Before the Master of the Rolls, and Lords Justices Lawrence and Russell*

The Court affirmed a judgment of Mr. Justice Eve, sitting in the Chancery Division, on an interesting question arising under the Public Health Act, 1925, in regard to the use of derelict land acquired by the Corporation for certain uses, including street widening and the making of new streets, and then used by the Corporation as a parking place for motor cars.

The action was brought by the Attorney-General at the relation of Mr. Chas. T. Stockdale, and Mr. Thos. Rutherford, of Sunderland, for a declaration that the Corporation were not entitled to provide a parking place for motor cars on the land, known as the Shrubbery, and an injunction to restrain them from using it for such a purpose. The land, about 6,000 square yards in area, was acquired by the Corporation about 1896 for purposes authorised by the Public Health Act, including street improvements, and a pleasure garden, and under the Post Office Act, for a new post office. The Local Government Board approved the purchase of the land, and the Post Office was built and road widened, the remainder of the land being laid out as an ornamental garden. In 1927 the Corporation resolved to use part of the Shrubbery as a parking place for motor cars, in pursuance of their powers under section 68 of the Public Health Act, 1925. There was a protest against the user of the land as a parking place, but the Corporation confirmed its use. The action was then brought. The plaintiff urged that as the land was purchased for specific purposes, it was *ultra vires* to use it for a motor-car park. Mr. Justice Eve held that the land could be used lawfully for the purpose of a widened street, and any part of a widened street could now, under section 68 of the Public Health Act, be used for a parking place.

The plaintiff now appealed.

Mr. C. A. Bennett, K.C., argued the case for the appellant, and Mr. Montgomery, K.C., that for the Corporation.

The Court dismissed the appeal, with costs.

The Master of the Rolls, in giving judgment, said that, looking at what took place in 1896 and before that time, it was impossible to say that the respondents had acquired the land for public walks and pleasure grounds only; they had also acquired it as a matter of street improvement. It was impossible to say that any particular part of the land acquired had been definitely delegated for any particular purpose, or that the purpose of the Corporation had been made plain as to what was to be pleasure ground and what was to be street, or the widening of a street.

The respondents had not only the wide powers to purchase land for street widening which were conferred by section 154 of the Public Health Act, 1875, but also the equally wide powers conferred by section 164. Reading those sections, it was impossible to say that the discretion of the respondents could be circumscribed in the way suggested, or that they were bound to allocate to the public land for walks or pleasure grounds not less in extent than that proportion which they had contemplated in 1896. It was impossible to say that the Corporation, holding those wide statutory powers, were tied down to any particular closely defined scheme. Section 68 of the Public Health Act must be read with the relevant sections of the Act of 1875, and under the powers of those two Acts the Corporation were clearly entitled to make a parking place in existing streets or in streets to be acquired. From those sections it was obvious that the respondents could, subject to the exercise of a proper discretion, determine how much of the land at their disposal was to be used for one purpose and how much for another. The appeal would be dismissed with costs.

Lord Justices Lawrence and Russell agreed.

SOCIETIES AND INSTITUTIONS

SWANSEA COMPETITION WINNERS CONGRATULATED

Architects and builders from Cardiff and many parts of South Wales, together with friends, assembled at the Engineers' Institute, Cardiff, on Thursday last, when a reception was accorded Mr. Percy Thomas, O.B.E., F.R.I.B.A., who, with his partner, Mr. Ivor Jones, has achieved the distinction of winning a £750 prize offered for the best design for the new civic buildings at Swansea.

Mr. Thomas lectured to the members of the South Wales Institute of Architects (Central Branch) and the South Wales Branch of the Institute of Builders upon his recent visit to America.

In the absence of the president of the institute (Mr. T. Alwyn Lloyd), the chair was occupied by Mr. H. Norman Edwards, who, on behalf of those present, congratulated Mr. Thomas upon the distinction which had been gained by him and his partner.

Mr. Thomas gave a description of his trip by aeroplane from New York to Washington, and of the cruise by steamer down the St. Lawrence River to Montreal.

The lecture was illustrated by a series of slides, many of them from photographs taken by the lecturer, showing the various important buildings in New York, Washington, Detroit, Toronto, Montreal, and Quebec, and also the Masonic temples at Washington and Detroit, as well as the fine memorials in the former town.

MR. D. S. MACCOLL ON ALFRED STEVENS

At a meeting of the Royal Society of Arts on Wednesday last, Mr. D. S. MacColl delivered a lecture on "Alfred Stevens: Architect, Sculptor, and Painter." Mr. P. Morley Horder occupied the chair.

Mr. MacColl said that Stevens was the greatest plastic artist our country had seen. The fact that he took Raphael and Peruzzi as his models in itself argued that he had an original mind, though it had been said his work lacked originality. Stevens's art was masculine; he stood aside from the tendency of his time to romanticism and the feminine in art. For a short time he was occupied with portrait painting, and it was significant that he beat all the regular English portrait painters of the nineteenth century.

Describing Stevens's architectural activities, Mr. MacColl said that it was Stevens's misfortune to have come up against the genius of Brunelleschi, whose work on brazen doors was superior. The lecture was illustrated by lantern slides.

TRIUMPHAL ARCHES OF THE ROMANS

Sir Banister Fletcher, P.R.I.B.A., in a lecture at the Central School of Arts and Crafts, described the triumphal arches of the Romans as the outcome of Roman love of pomp and ostentation and a desire to impress conquered peoples with the military power of the Empire. These arches, he said, were erected in various parts of the home country and in conquered provinces to celebrate the opening of a new road or seaport.

NORTHAMPTONSHIRE, BEDFORDSHIRE AND HUNTINGDONSHIRE ASSOCIATION OF ARCHITECTS

At the annual meeting of the above society, held at Northampton, the following officers were elected: President, Major B. C. Deacon, F.R.I.B.A. Vice-presidents, Messrs. F. H. Allen, A.R.I.B.A., and W. B. Stonebridge, F.R.I.B.A. Hon. secretary and treasurer, Mr. C. Croft, L.R.I.B.A., F.S.I. Hon. auditor, Mr. J. A. Piccaver. Council: Lieut.-Col. J. W. Fisher, F.R.I.B.A., and Messrs. J. A. Gotch, F.R.I.B.A., S. F. Harris, F.R.I.B.A., H. Haines, A.R.I.B.A., W. A. Lea, L.R.I.B.A., J. Murray, F. R. I. B. A., H. Norman, F. R. I. B. A., W. H. G. Hubbard, L.R.I.B.A., and R. J. Williams, F.R.I.B.A.

PROFESSIONAL CONDUCT AND PRACTICE

At the suggestion of the Practice Standing Committee, the Council of the R.I.B.A. have had reprinted and bound together in pamphlet form the following papers on Professional Conduct and Practice, by Mr. W. E. Watson, F.R.I.B.A., Barrister-at-Law, that have appeared in recent years in the R.I.B.A. Journal: (1) Easements; (2) Handbook of Architectural Practice; (3) Party Walls; (4) Contract; (5) Specification.

While the papers are not exhaustive treatises on the subjects, they are based on the standard works which are recommended for student courses, and amplified by incidents arising in the Courts of Justice.

A general index and an index of cases has been prepared by Mr. H. C. Hughes, M.A. (Cantab.), A.R.I.B.A. Copies of the pamphlet can be obtained on application to the Secretary R.I.B.A., 9 Conduit Street, W. 1. Price 2s. 6d.

R.I.B.A. SALARIED MEMBERS COMMITTEE

The following members, representing private practising architects, official architects and assistants, have been appointed to the R.I.B.A. Salaried Members Committee :

John Batty, A.R.I.B.A.
W. E. Brooks, A.R.I.B.A.
W. T. Curtis, F.R.I.B.A.
J. Grieve, A.R.I.B.A.
E. Stanley Hall, V.P.R.I.B.A.
W. H. Hamlyn, A.R.I.B.A.
L. A. F. Ireland, L.R.I.B.A.
H. V. Lanchester, V.P.R.I.B.A.
Charles McLachlan, A.R.I.B.A.
F. Winton Newman, F.R.I.B.A.
J. Alan Slater, F.R.I.B.A.
Herbert A. Welch, F.R.I.B.A.
Charles Woodward, A.R.I.B.A.
F. R. Yerbury, HON. A.R.I.B.A., and
Capt. A. Seymour Reeves, L.R.I.B.A.

The duties of the Committee embrace, *inter alia*, the following : (1) To report to the Council from time to time upon all matters affecting the welfare of the salaried members of the R.I.B.A. (2) To form an agreed policy among members of the R.I.B.A. relative to official salaried appointments. (3) To investigate conditions of employment, study the problems that arise, and recommend such action as may benefit all ranks of the profession.

Any comments that will assist the Committee in their work under paragraph (3) should be sent to Mr. William H. Hamlyn, Hon. Secretary, R.I.B.A. Salaried Members Committee, 9 Conduit Street, W.1.

THE A.B.S. OPTIONAL POLICY

A scheme has been devised by the Architects' Benevolent Society with a view to providing an assurance which can be adapted at the option of the policy-holder to meet financial requirements that may not be foreseen at the outset. An optional policy may be used for any of the following purposes : house purchase, family protection, education of children, partnership assurance, income on retirement, payment of death duties. After two years' premiums have been paid it can be used as the security for an immediate advance in the event of sudden illness or other misfortune. Particulars may be obtained from the Secretary, the Architects' Benevolent Society, 9 Conduit Street, W.1.

G.C.T.P.A. WHITSUNTIDE TOUR

The Garden Cities and Town Planning Association have arranged a housing and town planning tour of the northern capitals of Europe during Whitsuntide, June 3 to 14. The cities to be visited are Oslo, Stockholm, Copenhagen and Hamburg, and the tour has been arranged with the local authorities concerned, and representatives of those cities will accompany the parties on each series of visits.

Particulars are obtainable from the Secretary, Garden Cities and Town Planning Association, 3 Grays Inn Place, W.C.1.

COST OF FUEL FOR DOMESTIC PURPOSES

Mr. A. H. Barker, M.INST.C.E., reading a paper on " Tests of Comparative Costs of Fuels for Domestic Purposes " at the Joint Gas Conference at Birmingham, gave an account of a series of experiments and observations extending over five years, on the operation of the elaborate plant in his own private house, which was specially designed by himself for the purposes of the comparative tests.

He explained the great difficulty of making tests in such a way that the results could have any general application. If such tests were made in a scientific manner the processes were so different from those employed by a cook that the results had little practical application, except comparative ones. On the other hand, if they were made in the practical manner, by using the plant as it was used in ordinary service, the results were liable to vary very widely, through accidental and special circumstances, or on account of personal differences between the operators.

In order to secure reliable averages it was necessary to change over frequently from one kind of plant to another, and operate each for a considerable period. In order that that might be possible the house was supplied with three or four completely different sets of domestic appliances, each being in itself complete and adequate for the use of the entire house. The house was equipped with complete central heating, coal, gas and electric fire equipment in every room, with hot-water service which could be supplied either with coke, oil, gas, or electricity, with cooking appliances either by solid fuel, gas, or electricity, and refrigerator plant which could be operated either by gas or electricity.

The same inhabitants and staff had been in charge of the appliances throughout the whole period of the test, which extended over a period of five years. Hence the results had a degree of uniformity which was rarely obtainable.

The general results were as follows :

It was shown that gas boilers could only be employed for such purposes as central heating and the supply of hot water in a circulating system, at a cost, in gas, of about 3·7 times the cost of solid fuel.

That the general use of coal fires to produce the same results as were obtained by a good system of central heating, cost 2·7 times as much as when coke was burnt in the boilers.

That gas fires in a continuously used room cost about 2·2 times as much as the corresponding coal fires, while in an occasionally used room the actual cost was less than coal fires, depending on the degree of use.

The electric fires in the same conditions were found to cost from 1·57 to 1·98 times as much as the gas fires.

The point was emphasized that the economy, or otherwise, of gas and electric fires could only be secured by careful regulation. It was explained, however, that the cost of fuel was by no means the only cost of a fire, and it was shown that the whole cost of a gas fire was not notably greater than that of a coal fire, even in a constantly used room.

Comparisons were made between the use of gas and electric fires, and the conclusion was drawn that, for the purpose of that establishment, the most generally economical and satisfactory results were obtained with a gas fire of a " Cinderella " type.

A series of tables of comparative cost were given, from which it was shown that the general cost of cooking by electricity was about double that of cooking by gas, the cost of the fuel being standardized at 10d. per therm for gas and 1d. per unit of electricity.

Critical comparisons were also made between these two methods, and the lecture concluded with a table showing the respective equivalents of solid fuel, gas and electricity for the various purposes in a household.

Architects' Wills

Mr. David Wishart Galloway, F.R.I.B.A., of Market Street, Brechin, Forfarshire, left £17,544 (personal estate).

Mr. George James Cawthorne, of Petty France, Westminster, S.W., and of Staplehurst Place, Staplehurst, Kent, architect, left £52,989 (net personalty £1,342).

TRADE NOTES

The Leyland and Birmingham Rubber Co., Ltd., have moved their London office to larger premises in Grand Buildings, Trafalgar Square, W.C. This change has been made with the object of transferring the sales centralization from Leyland Works, Lancs, to London, in order to effect greater efficiency in both manufacture and sales service. London will now become the sales organization centre, and Leyland will devote its activities solely to manufacture. Each sales department will be in charge of a specialist who will be in constant touch with the firm's sales activities throughout the country.

The Cork Insulation Company, Ltd., have just published a new brochure describing their Eldorado cork tile flooring, and containing illustrations in colour of the various shades of brown in which the tiles are made. The tiles are claimed to be all pure cork, without the addition of any other substance. It is said that the cork as it comes from the tree is ground, cleaned and compressed into blocks, and then baked; this baking cements the particles into a firm mass by liquifying the natural gum in the cork. The baking also imparts to it the rich brown permanent colouring, ranging from light tan to dark chocolate, according to the duration of the heating process. The tile, it is claimed, is durable, noiseless and comforting to walk upon, non-slippery under any conditions, resilient and dustless, and can be made to harmonize perfectly with the appointments of any room. A copy of the brochure and samples of the tile can be obtained from the Cork Insulation Company, Ltd., 14 West Smithfield, London, E.C.1.

ANNOUNCEMENTS

The Rt. Hon. Viscount Goschen, G.C.I.E., C.B.E., has been appointed a director of Westminster Bank, Limited.

Sir Richard Tetley Glazebrook, K.C.B., D.SC., F.R.S., has been elected an honorary member of the Institution of Electrical Engineers.

Messrs. Lander, Bedells and Crompton, architects and surveyors, 6 John Street, Bedford Row, W.C.1, have taken into partnership Mr. Harold E. Moss, A.R.I.B.A., of 5 Verulam Buildings, Gray's Inn, W.C.1. The style and address of the firm remain as at present.

Mr. A. F. A. Trehearne, F.S.I., F.R.I.B.A., has taken into partnership Messrs. Eric W. Preston, F.S.I., and F. R. Jelley, A.R.I.B.A. The name will be Trehearne and Norman, Preston & Co., chartered architects and surveyors.

The partnership between Mr. W. J. Fitt and Mr. L. Prior-Hale, of Messrs. Fitt and Prior-Hale, of 3 John Street, Bedford Row, W.C., has been dissolved. The practice will be continued by Mr. L. Prior-Hale under the same name and at the same address.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :

Locarno Dance Hall (pages 347–350). General contractors, Pitcher Construction Co., Ltd. Clerk of works, F. Pearse. Sub-contractors : Limmer and Trinidad Asphalte Co., Ltd., asphalt; A. C. W. Hobman & Co., Ltd., artificial stone; Lindsay's (Paddington) Iron Works, Ltd., structural steel; Vigers, Sons & Co., Ltd., wood-block flooring (including dance floor); The Luxfer Co., Ltd., lantern lights and skylights; Diespeker & Co., Ltd., terrazzo paving, reinforced terrazzo, w.c. partitions, and patent suspended flooring; J. Jeffreys & Co., Ltd., central heating and ventilation; Strand Electric and Engineering Co., Ltd., electric wiring and telephones; A. Emanuel and Sons, electric light fixtures; Leeds Fireclay Co., Ltd., sanitary fittings; J. W. Gray and Sons, lightning conductor system; Asbestos Cement Building Products, Ltd., standard corrugated (grey colour) asbestos cement sheet roofing; Haywards, Ltd., canopy at entrance; Lockerbie and Wilkinson, Ltd., and James Gibbons, Ltd., door furniture; James Gibbons, Ltd., casements and lay lights in main hall; Safety Tread Syndicate, Ltd., iron staircases; W. B. Simpson and Sons, wall tiling; Wilmer and Sons, Ltd., ornamental grilles; A. C. W. Horman & Co., Ltd., granolithic paving; Francis Morton, Jun., & Co., spring dance floor; Jackson Boilers, Ltd., kitchen fittings; North British Rubber Co., Ltd., rubber flooring.

Little Bardfield Hall, Braintree (pages 364-366). Main contract, William Downs, Ltd. Smaller contract, Chas. Dare. Sub contractors : Esmond Burton, Red Lion St., modelled plasterwork ; Comyn Ching & Co., Ltd., hot-water direct supply and central heating ; Mr. Savage, electric lighting.

Castlefield, Wimbledon Park (pages 372–373). General contractor, C. H. King. Sub-contractors, Thomas Lawrence Bros., bricks; Roberts, Adlard & Co., tiles; Norris, Dutton & Co., central heating; City Iron Co., stoves and grates and sanitary fittings; National Radiator Co., Ltd., "Ideal" boilers and radiators; Yannedis & Co., door and window furniture; Hewin, Rogers, Hartley & Co., plasterwork; Davis, Cash & Co., metalwork and wrought ironwork; Sibley Pottery and Van Straaten Co., tiling; Luff and Sons, shrubs and trees; United Water Softeners, water-softening plant.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full published specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

4162. Helsby, C. Reinforced-concrete structures. February 7.

4365. Walker, F. T. Building construction. February 8.

SPECIFICATIONS PUBLISHED

324709. Harris, L. G. Slabs and slab building-constructions.

324812. Chevron, A. Composition and method for the manufacture of building-bricks, flagstones, and similar products.

COMPETITION NEWS

March 10. The Council of the Metropolitan Borough of Greenwich invite architects to submit designs for a drinking fountain, which it is proposed to erect at Blackheath on a site facing the War Memorial at the junction of Maze Hill and Charlton Way. Premiums : £50, £20 and £10. Particulars of the competition and a copy of the site plan may be obtained from Frederick J. Simpson, Town Clerk, Town Hall, Greenwich Road, S.E. 10. Latest date for applications: March 10.

March 31. — The Accrington Corporation invite architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor : Herbert J. Rowse, F.R.I.B.A. Premiums : £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars, may be obtained from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before March 31.

The Royal National Eisteddfod of Wales, 1930, has just issued a list of competitions in the arts, crafts and science section. Mr. Percy E. Thompson, F.R.I.B.A., has been appointed assessor. Following is a list of the architectural competitions : the first three are confined to persons under thirty years of age.

1 : A public or town hall for a provincial town to seat 2,000 persons—about 1,500 on the ground floor and 500 in a balcony. Also a small hall is to be incorporated in the design, arranged so that it may be used separately or in conjunction with the large hall. The site is facing a public square, and has a frontage of 150 ft. and a depth of 300 ft. Prize, £50.

2 : A central motor-bus station or terminus in a provincial town. The site is on a main road and has a frontage of 200 ft., with unlimited depth. Prize, £25.

3 : A pair of workmen's cottages in an industrial area. There is no limit as to the site, but due regard must be paid to simplicity of planning and economy of construction. Prize, £25.

4 : Set of measured drawings of architecture. This competition is confined to persons under twenty-four years of age. Prizes : first, £15 15s.; second, £5 5s.

The drawings are to be delivered to Mr. W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts.

Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.).

THE ARCHITECTS' DIARY

WEDNESDAY, FEBRUARY 26

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. "Italian Art and the Italian Exhibition." By William G. Constable, M.A., F.S.A. Lady Austen Chamberlain, G.B.E., will preside. (Lantern Illustrations.) **8 p.m.**

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Roman Architecture." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

THURSDAY, FEBRUARY 27

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Broadcasting by Electric Waves." By Captain P. P. Eckersley. **6 p.m.**

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Social Life and Art in France during the Eighteenth Century." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Ferro-Concrete Cooling Towers." By T. J. Gruerritte. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Timber Architecture in Old Houses and Churches." By Philip M. Johnson, F.S.A., F.R.I.B.A. (Lantern Illustrations.) **7.30 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. At the Caxton Hall, Westminster, S.W.1. "The Training of Operators in the Welding and Cutting Industries." By J. Ryder. **7.45 p.m.**

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS, 84 Eccleston Square, S.W.1. "Structural Design Examination under Building Bye-laws." By Mr. Ferrington, M.I.STRUCT.E. **4 p.m.**

FRIDAY, FEBRUARY 28

R.I.B.A., 9 Conduit Street, W.1. London Architecture Medal, 1929. Latest date for submission of nominations.

INSTITUTION OF STRUCTURAL ENGINEERS, Midland Counties Branch. Ordinary Meeting. At the Chamber of Commerce Buildings, New Street, Birmingham, "Types of Movable Bridges." By J. D. Vaughan, M.SC., A.M.INST.C.E. **6.30 p.m.**

SATURDAY, MARCH 1

Sunrise, 6.47 a.m. Sunset, 5.39 p.m.

INSTITUTION OF HEATING AND VENTILATING ENGINEERS, Manchester and District Branch. Visit to the Manchester Newspaper Works and Offices. (Time will be announced later.)

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to the Acton Technical Institute. Meet in Acton High Street, main entrance, at 2.30 p.m. **2.30 p.m.**

MONDAY, MARCH 3

R.I.B.A., 9 Conduit Street, W.1. General Meeting, "The Design of Modern Railway Stations in Europe and America." By Frank Pick. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, W.C.2. Cantor Lecture. "Recent Improvements in Methods of Brickmaking." By Alfred B. Searle. (Lecture III.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, South Midland Centre. At the University, Edmund Street, Birmingham. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.), and L. C. Grant. Also, "The Heat Pump—An Economical Method of Producing Low-Grade Heat from Electricity." By T. G. N. Haldane, M.A. **7 p.m.**

BIRKBECK COLLEGE, Bream's Buildings, Fetter Lane, E.C.4. "The Isometric Diagram of the Construction of the Dome of St. Paul's Cathedral." By Professor Beresford Pite, M.A., A.R.C.A., F.R.I.B.A. Sir Frederick Kenyon, G.B.E., K.C.B., D.LIT., will preside. **5.30 p.m.**

TUESDAY, MARCH 4

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Seventh of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

WEDNESDAY, MARCH

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper by L.A.P.A. **8 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Ordinary Meeting. "The Ford Factory, Dagenham." By Major E. H. Heathcote, M.A.(CANTAB.), F.R.I.B.A., A.M.INST.C.E., A.M.I.MECH.E. **7 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. Discussion on "The Space Required for Central Station Equipment." **7 p.m.**

THURSDAY, MARCH 6

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting: Nomination of Officers. "Classic Forms and English Geology." By Hope Bagenal, D.C.M., A.R.I.B.A. **7 p.m**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Plywood: Its Influence on Modern Furniture Design." By Percy A. Wells. (Lantern Illustrations.) **7.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual Dinner at the Florence Restaurant, Rupert Street, W.1. 7.15 for 7.30 p.m. **7.15 p.m.**

SATURDAY, MARCH 8

Sunrise, 6.32 a.m. Sunset, 5.51 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Old and New Architecture." By the Hon. Humphrey Pakington, A.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

MONDAY, MARCH 10

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Some District Heating Systems." By L. J. Fowler, B.A. Light Refreshments. **6.30 p.m.**

WEDNESDAY, MARCH 11

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Eighth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. **5.30 p.m.**

THURSDAY, MARCH 13

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate on "Is the Skyscraper Architecture?" Affirmative, D. B. Smith. Negative, G. L. Crowther. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Walnut and Mahogany Furniture from 1710 to 1750." By Herbert Cescinsky. **7.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Pyramid Building Problems: Manpower Organization in the Pyramid Age." By D. Davidson, F.R.S.A. **6.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **6 p.m.**

FRIDAY, MARCH 14.

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At Loughborough. Ordinary Meeting. "Some Experiments in Earth Pressure." By Dr. T. E. N. Fargher M.ENG.PH D., A.M.INST.C.E.

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Sessional Meeting. At the Council Chambers, Middlesbrough. Discussion on: "Ventilation of Cinemas, etc." To be opened by S. W. Walton, M.B., B.S., D.P.H. 4 p.m. Tea 5 p.m. Visit to the New School Clinic, Woodlands Road. 6 p.m. Discussions on "Ventilation of Cinemas, etc.," and "Flooding from Streams at Middlesbrough." To be opened by S. E. Burgess, M.INST.C.E. **7 p.m.**

TOWN PLANNING INSTITUTE. At the Caxton Hall, Caxton Street, Westminster, S.W.1. General Meeting. "Town Planning and the Man in the Street." By Capt. B. S. Townroe, M.A., HON. A.R.I.B.A. **8 p.m.**

SATURDAY, MARCH 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Messrs. Gamage's New Premises, near Marble Arch. Meet at entrance in North Row. **2.30 p.m.**

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At the Council Chamber, Middlesbrough. Meet at the Municipal Buildings for visits to Housing Scheme areas: Acklam Hall, Middlesbrough, Redcar Main Trunk Road, and Main Sewer Works, Cargo Fleet Lane. **10.30 a.m.**

MONDAY, MARCH 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting. Presentation of the Royal Gold Medal. **8.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "High Tension Sub-station Control Gear." To be opened by A. F. Harmer. **7 p.m.**

TUESDAY, MARCH 18

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Last of a course of nine public lectures on "Italian Paintings." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. Paper on "The Lighting of a Large Liner." Light Refreshments at 6.30 p.m. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Voltage Control of Large Alternators." By H. W. Taylor. **7 p.m.**

INSTITUTE OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. "Electric Locomotives." By D. J. Watkins.

WEDNESDAY, MARCH 19

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Annual Reception. **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Design in Town Planning." By Dr. Raymond Unwin, F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Portrait in Later Monumental Sculpture." By K. B. ESDAILE (Mrs.). **8 p.m.**

THURSDAY, MARCH 20

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. Election of Officers. "Mainly About Germany." By Howard Robertson, F.R.I.B.A., S.A.D.G. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "London in the Middle Ages." By D. Martin Roberts, M.A. (Lantern Illustrations.) **7.30 p.m.**

FRIDAY, MARCH 21

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Annual Meeting at the Royal Institute Galleries, Piccadilly, W.1.

SATURDAY, MARCH 22

Sunrise, 6 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Houses at Home and Abroad." By Oswald P. Milne, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Post Office (London) Railway, Mount Pleasant N.W. **4 p.m.**

MONDAY, MARCH 24

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Style in Sculpture." By Eric Gill. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

TUESDAY, MARCH 25

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Dominions and Colonies Meeting. "The Work of the British Association in Relation to the Empire." By O. J. R. Howarth, O.B.E., M.A. **4.30 p.m.**

WEDNESDAY, MARCH 26

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Architecture of To-day and To-morrow." By Howard Robertson, M.C., F.R.I.B.A., S.A.D.G. **8 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Nature and Modern Design." By Professor R. V. Gleadowe. (Lantern Illustrations.) **7 p.m.**

THURSDAY, MARCH 27.

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Some New Ideas on the Design of Dams." By E. Godfrey. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Lacquerwork: Its History, Influence and Decorative Qualities." By E. R. Gribble. **7. 30 p.m.**

FRIDAY, MARCH 28.

INSTITUTION OF ELECTRICAL ENGINEERS. North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Marine Diesel Installations, with particular reference to Auxiliary Machinery." By J. Calderwood, M.SC. **7.15 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Annual General Meeting. Discussion on "Mechanical Solution of Statically Indeterminate Structures." To be opened by H. W. Coultas, M.SC. **6.30 p.m.**

SATURDAY, MARCH 29.

Sunrise, 5.44 a.m. Sunset, 6.27 p.m.

MONDAY, MARCH 31.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "Loud-Speakers." To be opened by Captain P. P. Eckersley. **7 p.m.**

ACCRINGTON COMPETITION. Latest date for submission of designs for the New Police and Fire Stations.

SATURDAY, APRIL 5.

Sunrise, 5.29 a.m. Sunset, 6.38 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Marble Arch Flats, adjoining Regal Cinema. Meet main doorway in Great Cumberland Place at 2.30 p.m. **2.30 p.m.**

MONDAY, APRIL 7.

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Antonio da San Gallo the Younger." By J. Hubert Worthington, O.B.E., M.A. **8 p.m.**

TUESDAY, APRIL 8.

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Textile Lighting." By S. Anderson, B.SC. **7 p.m.**

THURSDAY, APRIL 10.

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. "Some Interesting Arc-Welded Jobs." By H. B. White and R. Tuddenham. (Lantern Illustrations.) **7.30 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Committee of King Edward's Hospital Fund is to erect a health centre and out-patients' department at BECONTREE, at a cost of £7,250.

The BERMONDSEY B.C. is purchasing a site in Odessa Street for a re-housing scheme.

The BERMONDSEY B.C. has passed amended plans for the erection of the Tower Bridge Road clinic, at a cost of £94,000.

The BERMONDSEY B.C. has prepared a revised scheme for the Vaughan Street improvement, provision being made for the erection of six shops, twenty cottages and fifty-four flats.

Plans passed by the BERMONDSEY B.C.: Building, Jacob Street, for Messrs. Seth Taylor, Ltd.; building, George Row, for Messrs. Knapp-Fisher, Powell and Russell; extension, "The Victoria" public-house, Pages Walk, Brick Lane, for Mr. Arthur E. Sewell, L.R.I.B.A., for Messrs. Truman, Hanbury, Buxton and Co.; pump house, Lavender Wharf, Rotherhithe Street, for Messrs. H. Somerford and Son, Ltd.

Plans have been passed by the CITY OF LONDON Corporation for rebuilding 1 Gough Square, 8 Old Jewry and Grocers' Hall Court.

The L.C.C. has passed plans submitted by Sir E. Owen Williams, on behalf of the *Daily Express*, for the erection of premises in Fleet Street and Shoe Lane, CITY, E.C.4.

Plans passed by the FULHAM B.C.: Nurses' home, Western Hospital, Seagrave Road, for Messrs. Bridge & Co.; additions, "Hand and Flower" public-house, Hammersmith Road, for Mr. F. M. Kirby; additions, Willow Bank Wharf, Putney Bridge, for Messrs. Fennings & Co.; petrol station, 79–85 New King's Road, for Mr. G. Guy Rogers; buildings, Parsons Green Lane and Harbledown Road, for Messrs. MacLaughlin and Harvey.

The HAMMERSMITH B.C. is to erect a central depot at Crisp Road, at a cost of £51,000.

Plans passed by the KENSINGTON B.C.: Building, Fulham Road, adjoining the Brompton Cemetery; alterations and additions, "Churchill Arms" public-house, Church Street; building, rear of 59 Holland Park; buildings, site of 197–205 Brompton Road; alterations and additions, 23 and 24 Cromwell Place and 41 Alfred Place.

The L.C.C. is purchasing a site for the erection of a new mental hospital

The MARYLEBONE B.C. has decided to allocate a site at the cemetery for the erection of a crematorium.

Mr. Martin Harvey, of the Eton Estates, Ltd., is developing the site on the north side of Marylebone Road, abutting upon Upper Baker Street and New Street, MARYLEBONE.

The London County Council has sanctioned the formation of a street (arcade) for pedestrians, to lead from PICCADILLY to Jermyn Street, in connection with the erection of the New Princes restaurant at 190–196 Piccadilly and 36–40 Jermyn Street.

The Kent Education Committee has acquired additional lands at SIDCUP for the erection of a central school.

The Kent Education Committee is to erect new premises for the SIDCUP School of Art.

Plans passed by the STOKE NEWINGTON B.C.: Bakery, rear of 113 Green Lanes, for London Co-operative Society, Ltd.; factory, rear of 10 and 11 Paradise Row, for Messrs. Arthur J. King, Ltd.; workshop, rear of 134 Boleyn Road, for Mr. J. A. Lauchlan; building, "Manor House" public-house, for Messrs. E. A. Roome & Co., Ltd.

Plans passed by the WESTMINSTER City Council: Shop fronts and shelter, 36–40 Jermyn Street, for Mr. H. K. Dyson; shop front, 22 Great Marlborough Street, for Mr. W. G. Sumner; addition to shop, 4 Tilney Street, for Messrs. Bomer and Gibbs; building, between Arundel House and Astor House, Approach Road, for Messrs. Grace and Farmer; building, 30–32 Upper Brook Street, for Messrs. Wimperis, Simpson and Guthrie.

SOUTHERN COUNTIES

The BOURNEMOUTH Corporation Housing Committee is to invite tenders for the erection of a further twenty-seven houses in Luckham Road.

The BOURNEMOUTH Education Committee has passed plans for the erection of a central hall, gymnasium, laboratories, etc., at the School for Girls.

Plans passed by the BOURNEMOUTH Corporation: Shop, Charminster Road, for the International Tea Co. Stores; bakehouse and store, rear of 104 Elmes Road, for Mr. L. A. Sanders; bank and residence, 42 Southbourne Grove, for the Westminster Bank, Ltd.; hotel (amended plan), Castle Lane, for Messrs. Eldridge, Pope & Co., Ltd.; office, rear of Connaught and Christchurch Roads, for Mr. C. H. Perry; garages, Upper Hinton Road, for Messrs. Preston and Redman; engine house, Palmerston Road, for the Malmesbury and Parsons Dairies, Ltd; rebuilding workshop and stores, Holdenhurst Road, for Messrs. W. Mabey and Sons; forty-four houses (amended plan), Seafield Road, for Mr. S. Kermode; extensions to factory, South Road, for the Direct Supply Aerated Water Co.; two houses, Green Road, for Mr. A. S. Prince; two houses, Saxonbury Road, for Mr. M. S. Parsons; shops, Tuckton Road, for Ushers' Wiltshire Brewery, Ltd.; additions, Old Christchurch Road, for Messrs. Farrars Silks, Ltd.; three houses, Priory View Road, for Mr. G. Saunders; two houses, The Avenue, Moordown, for Mr. H. Dean; three houses, Redbreast and Nursery Roads, for Mr. L. R. Hall; two houses, Redbreast Road, for Mr. J. Cole; two houses, Spring Road, for Mr. Aston; two houses, Wheaton Road, for Messrs. Rosser and Sturman; eight shops, Wimborne Road, and Bloomfield Road, for Mr. F. Moorman.

The Kent Education Committee is to extend the BROMLEY county school for boys.

The Kent Education Committee is acquiring sites at CHISLEHURST and GOUDHURST for the erection of central schools.

The Kent Education Committee has acquired a site at HERNE BAY for the erection of a central school.

The Bexleigh Estates, Ltd., is developing the St. Mary estate, HASTINGS, where 130 houses are to be built from the designs of Mr. H. H. Ford.

The HASTINGS Corporation is to acquire a site at Hollington, where the borough engineer estimates that it will be possible to erect 168 houses.

Plans passed by the HASTINGS Corporation: Restaurant, Commercial Road, Fishmarket, alterations, 39A High Street, and a bungalow, St. Helen's Park Road, for Mr. J. Hunt (architect); alterations, 32–36 Castle Hill Road, for Messrs. Callow and Callow (architects); house, Hillside Road, for Mr. H. J. Richardson (architect); additions, 5 White Rock Road, and six houses, Bexhill Road, St. Leonards, for Messrs. Ward, Son and Wray (architects); twenty-two houses, Elphinstone Avenue, for Mr. H. M. Jeffery (architect); bungalow, Vale Road, St. Leonards, for Mr. R. Hembrow (architect); eight houses, The Broadway, Fairlight Road, for Mr. L. Towner (architect); amusement arcade, Parade House and 40 George Street, for Mr. H. W. Coussens (architect); house, Upper Church Road, St. Leonards, for Mr. J. H. Richardson (architect); house, Amberst Gardens, for the Universal Housing Co.; additions, Ozone Laundry, Parker Road, and dairy, Cambridge Road, for Mr. P. H. Oxley (architect); workshop, rear of 186 Downs Road, and four flats, 19 West Hill, St. Leonards, for Mr. H. Burleigh (architect); house, Wykeham Road, for Mr. J. S. D. Hicks (architect); electric passenger lift, Sandringham Hotel, Pelham Place, for Messrs. Porn and Dunwoody, Ltd.; new streets and sixteen houses, St. Mary's estate, Bexhill Road, for Mr. H. H. Ford (architect).

The KENT Education Committee is seeking sanction to borrow £1,347,000 for the erection of central and elementary schools.

The Kent C.C. is to erect new buildings for the Stores Department at the Springfield site, MAIDSTONE, at a cost of £30,000. Proposals are under consideration for new county offices.

The Hampshire Education Committee is to erect an elementary school at MILTON, to accommodate approximately 120 children, junior mixed.

The Kent Education Committee has selected a site at ORPINGTON for the erection of a junior and infants' school.

The OXFORD Corporation Housing Committee recommends negotiating for the purchase of approximately forty-eight acres of land at Headington.

Plans passed by the OXFORD Corporatio: House, Sandfield Road, Headington, for Mr. F. Church; extension to premises, Iffley Road, for South Midland Garage; new premises, Holloway, for Hall's Oxford Brewery; additions, Temple Cottage, Oxford Road, Cowley, for Drs. McCay and Annott; rebuilding, Exeter Hall, Old Road and Temple Road, Cowley, for Hall's Oxford Brewery; two houses, York Avenue, Headington, for Mr. Knight; workshop and store, Windmill



Castlefield, Queensmere Road, Wimbledon Park, S.W.19. Designed by Harold E. Moss. The entrance front (left) and the garden side (right). The walls are of brick, and the roof is covered with tiles. This house forms part of the scheme for the development of the Queensmere Estate. *For plans see page 373.*

Road, for Mr. A. W. Smith; house, Barracks Road, Headington, for Mr. H. Hyde; licensed premises, London Road, for Hall's Oxford Brewery; house, Sandfield Road, Headington, for Mr. G. E. Coleman; house and shop, Oxford Road, Cowley, for Mr. A. F. Oates; alterations, Cornmarket Street, for Messrs. F. W. Woolworth & Co.; house, London Road, Headington, for Mr. W. Walker; church and classroom, George Street, for Mr. A. L. Lancaster; house, Belbroughton Road, for Dr. W. S. McMichael; alterations and extensions, 55 St. Clement's Street, for Mr. E. R. Blunsdon; house, Pullen's Lane, for Capt. E. R. Arbuthnot, D.S.O.; extension to bakery, Red Lion Square, for Messrs. Cadena Café's; rebuilding "The White Horse" public-house, London Road, Headington, for Messrs. Morrell's Trustees; house, Manor Road, Headington, for Mr. F. Hoard; twenty-three houses, Green Road Estate, Headington, for Messrs. W. and A. Davies; alterations and additions, Queen Street, for Messrs. Quelch and Son.

The Kent C.C. has acquired a site at SNODLAND for the erection of a maternity and child-welfare clinic.

The Hampshire Education Committee has decided to erect an elementary school at TITCHFIELD, to accommodate approximately 300 children.

SOUTH-WESTERN COUNTIES

The DORCHESTER Corporation is purchasing four acres of land in Victoria Road, for a housing scheme.

Plans passed by the PAIGNTON U.D.C.: Tea room, Goodrington House, Tanner's Lane, for Mr. H. B. Ashcroft; two houses, Laura Grove, for Mr. A. E. Knight; house, Queen's Road, for Mr. A. Rowe; new road, off Headland Park Road, for Mr. H. Procter; recreation room, etc., "Arcadia" holiday camp, Totnes Road, for Mr. H. Booth; house, Headland Grove, for Capt. Lane; house, Barcombe Heights, for Mrs. Wilson; house, Marldon Hill, for Miss M. A. Booty; eight houses, Barnfield Road, for Messrs. Pecke Bros.; bungalow, Dunstone Park, for Mrs. I. G. Kenkins; six houses, Headland Park Road, for Mr. H. Proctor.

EASTERN COUNTIES

The Herts Education Committee has approved plans prepared by Mr. C. F. Skipper for the erection of a grammar school at BARNET, at an estimated cost of £50,000.

The BEDFORD Corporation General Purposes Committee is seeking sanction to borrow £9,000 in connection with the Harpur Street improvement.

The BEDFORD Education Committee estimates for a capital expenditure of £50,000 for alterations at schools and enlarging the Pearcey Road school, and has asked Mr. G. P. Allen, the school architect, to proceed with the preparation of sketch plans.

Plans passed by the BEDFORD Corporation: House and garages, Warwick Avenue, for Mr. E. J. Smith; conversion into offices and flat, 94 Midland Road, for Mr. G. P. Allen; two houses, Goldington Road, and two houses, Southville Road, for Mr. E. H. C. Inskip; rebuilding "The Barley Mow" public-house, Bromham Road, for Messrs. Newland and Nash, Ltd.; 132 dwellings, Fenlake Road, Christie Road and Gifford Road, for the Corporation.

The Herts Education Committee has asked the county surveyor to prepare plans for the erection of an elementary school at EAST BARNET village, and also for one in Manland Road, HARPENDEN.

The LOWESTOFT Corporation Education Committee is acquiring land in Church Road, for the proposed erection of a senior girls' school.

Plans passed by the LOWESTOFT Corporation: Alterations and additions, London Road, for Messrs. F. W. Woolworth & Co., Ltd.; additions, Crown Street, for Messrs. Chambers and Son; shop, Beccles Road, Oulton Broad, for Mr. J. R. Sutton; two houses, Laurel Road, for Mr. F. W. King; new inn, Carlton Road, for Messrs. E. and G. Morse; two houses, Victoria Road, for Mr. W. Carver; two shops, London Road, for Miss L. M. Coates; four bungalows, Colville Road, Oulton-Broad, for Mr. A. E. Ingles; alterations, Kirkley Post Office, Carlton Road, for Mr. R. Plant.

The Herts Education Committee has purchased a site in Hatfield Road, ST. ALBANS, for the erection of an elementary school.

The Herts Education Committee has passed the plans prepared by the county surveyor for the erection of a central school at Hatfield Road, ST. ALBANS, at an estimated cost of £25,000.

NORTHERN COUNTIES

Plans passed by the BARNSLEY Corporation: House and shop, Pontefract Road, Monk Bretton, for Mr. W. Davis; hotel, Redhill Avenue, Kendray Estate, for Barnsley Brewery Co., Ltd.; two houses and shops, Pontefract Road, Monk Bretton, for Mr. A. Radford; shop and bakehouse, Pontefract Road, for Miss E. M. Booton.

The CHESTER Corporation has prepared a scheme for the construction of a ring road at a cost of £284,000.

The ELLESMERE PORT and WHITBY U.D.C. is to undertake works of sewerage and sewage disposal at a cost of £40,000.

The GRIMSBY Corporation is to erect a maternity home at Nunsthorpe adjoining the present home, and adapt the present home as staff quarters, at a total estimated cost of £17,540.

WALES

The SWANSEA Corporation has decided to erect sixty-six houses on the Townhill estate by direct labour, and obtain tenders for the erection of sixty-two houses.

The Picton Cinema Co., Ltd., has prepared plans of a cinema to be erected at Picton Place, St. Helens Road, SWANSEA.

The SWANSEA Corporation has authorized the borough engineer to proceed with the road and sewer works on the Cadle estate at Ffforestfach, so that arrangements may be made for the erection of houses.

Plans passed by the SWANSEA Corporation: Alterations and additions, Mynyddbach Chapel, for the trustees; alterations, Northampton Place, for the General Electric Co., Ltd.; two houses, Brondeg, Manselton, for Messrs. Weaver Bros.; house, Middle Road, for Mr. G. Emmanuel; five houses, Pennard Street, for Mr. G. Davey; two houses, Neath Road, Peniel Green, for Mr. Thos. Rees; house, Dunvant Road, for Mr. M. Evans; two houses, Brookvale Road, for Messrs. E. E. Allen and D. C. Llewellyn; bungalow, Cockett new road, for Mr. D. Black; five houses, Eastbourne Road, Sketty, for Mr. C. H. Wastell; four houses, Dyfatty Street, for the Swansea Hide and Skin Co.; recreation room, Bethesda Street, for the Great Western Railway Social and Educational Union; two shops and flats, Sketty Road, for Mr. J. Hubert Roberts; office, De La Beche Street, for Britannic Assurance Co., Ltd.; fifty-two houses, Carnglas Estate, for Messrs. T. and G. Spragg; additions, Port Tennat Road, for Mr. S. R. George.

SCOTLAND

Messrs. D. Campbell and Son are to erect a showroom, offices and workshop in Crow Road, Jordanhill, GLASGOW

The GLASGOW Corporation has approved the layout plan for the housing scheme at Torbreck Street, showing a proposal to build 372 houses.

The GLASGOW Corporation Housing Committee has adopted a layout of the ground at North Street, Whiteinch, showing sixty-six tenement houses for rehousing purposes.

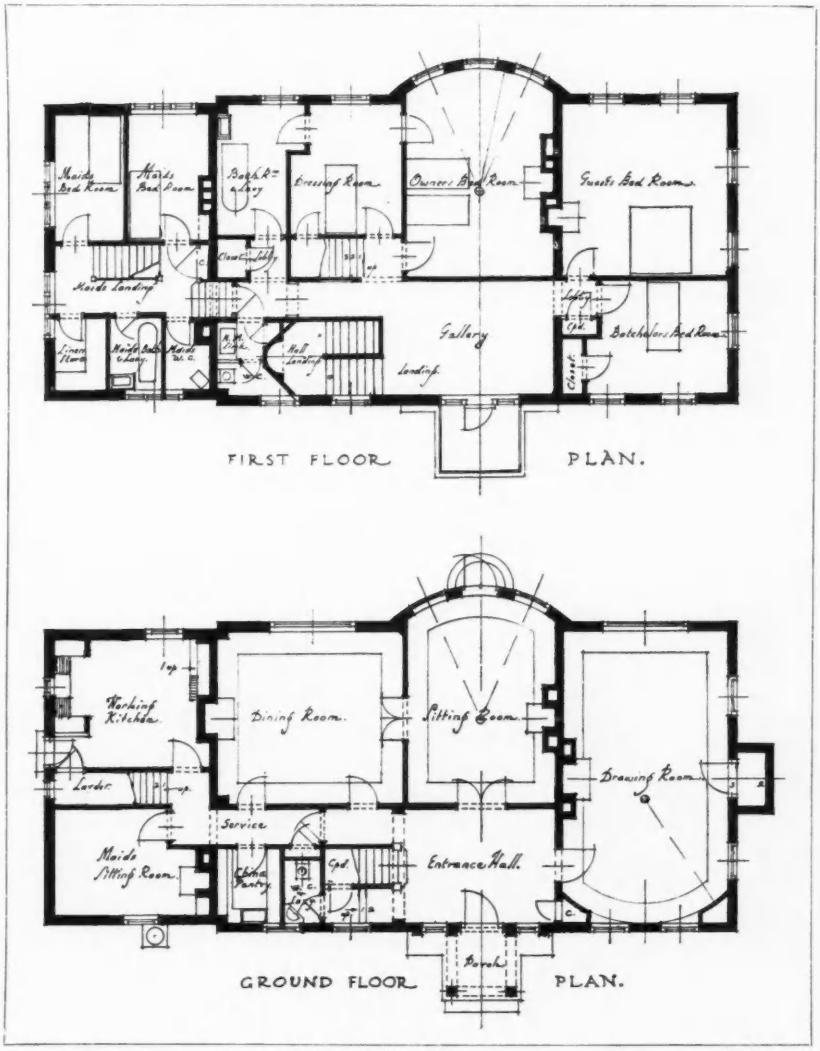
The GLASGOW Corporation Housing Committee has adopted a plan submitted by the housing director of a layout of the remaining area of ground at Torbreck Street, showing 198 houses on the intermediate type.

The GLASGOW Corporation has adopted an amended layout plan for the West Drumoyne Housing Scheme, showing sixty two-story houses and 810 three-story tenement houses.

MISCELLANEOUS

The DOUGLAS (I.O.M.) Corporation has asked the town clerk to make inquiries for sites for additional houses, and is considering a scheme for the erection of flats in Bigwell Street.

The ISLE OF ELY C.C. has instructed the county surveyor to proceed with the preparation of plans for the reconstruction of Ponds Bridge, Angle Bridge and Fields End Bridge, Whittlesey.



Castlefield, Queensmere Road, Wimbledon Park, S.W.19. Designed by Harold E. Moss. The entrance hall gives off to the drawing-room, sitting-room and dining-room. The corridor adjoining the main staircase leads to the service quarters.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_3	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_3	Aylesbury ..	S. Counties	1 3½	11½
B_3	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A_1	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_3	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_3	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_3	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_3	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B_1	Chatham ..	S. Counties	1 4½	1 0½
B_1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank ..	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland ..	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_3	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_3	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate ..	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_3	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_3	Ipswich ..	E. Counties	1 5½	1 1½
B_3	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_3	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_3	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_3	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_3	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_3	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_3	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_3	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_3	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_3	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_3	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_3	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_3	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_3	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour ;* NAVVY, 1s. 3½d. *per hour :* TIMBERMAN, 1s. 5d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0
Screened ballast or gravel, add 10 per cent. per yd.			
Clinker, breeze, etc., prices according to locality.			
Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.			
Transport hire per day :			
Cart and horse £1 3 0 *Trailer*	£0	15	0
3-ton motor lorry 3 15 0 *Steam roller*	4	5	0
Steam lorry, 5-ton 4 0 0 *Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* BRICKLAYER, 1s. 8½d. *per hour ;* PLUMBER, 1s. 8½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			

Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour ;* DO. *fixer,* 1s. 9½d. *per hour ;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone :			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6

RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour ;* TILER, 1s. 8½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200 :			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0
Old Delabole Med. Grey	*Med. Green*		
24 in. × 12 in. £42 11 3	£45	1	0
20 in. × 10 in. 31 4 3	33	0	6
16 in. × 10 in. 20 18 0	22	4	9
14 in. × 8 in. 12 1 0	12	16	3
Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal :

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

Med. Grey			Med. Green		
24 in. × 12 in.	£5	0 0	£5	2	0
20 in. × 10 in.	5	5 0	5	10	0
16 in. × 10 in.	4	15 0	5	1	0
14 in. × 8 in.	4	10 0	4	15	0
Green randoms			6	7	9
Grey-green do.			5	9	0
Green peggies, 12 in. to 8 in. long			4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour ;* JOINER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds) :			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup..	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup..	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour;* MATE, *do.* 1*s.* 3½*d. per hour;* ERECTOR, 1*s.* 8½*d. per hour;* FITTER, 1*s.* 8½*d. per hour;* LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO.. in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour;* MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt..	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	—

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour;* LABOURER, 1*s.* 3½*d. per hour;* FRENCH POLISHER, 1*s.* 8½*d. per hour;* PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	6
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup..	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.

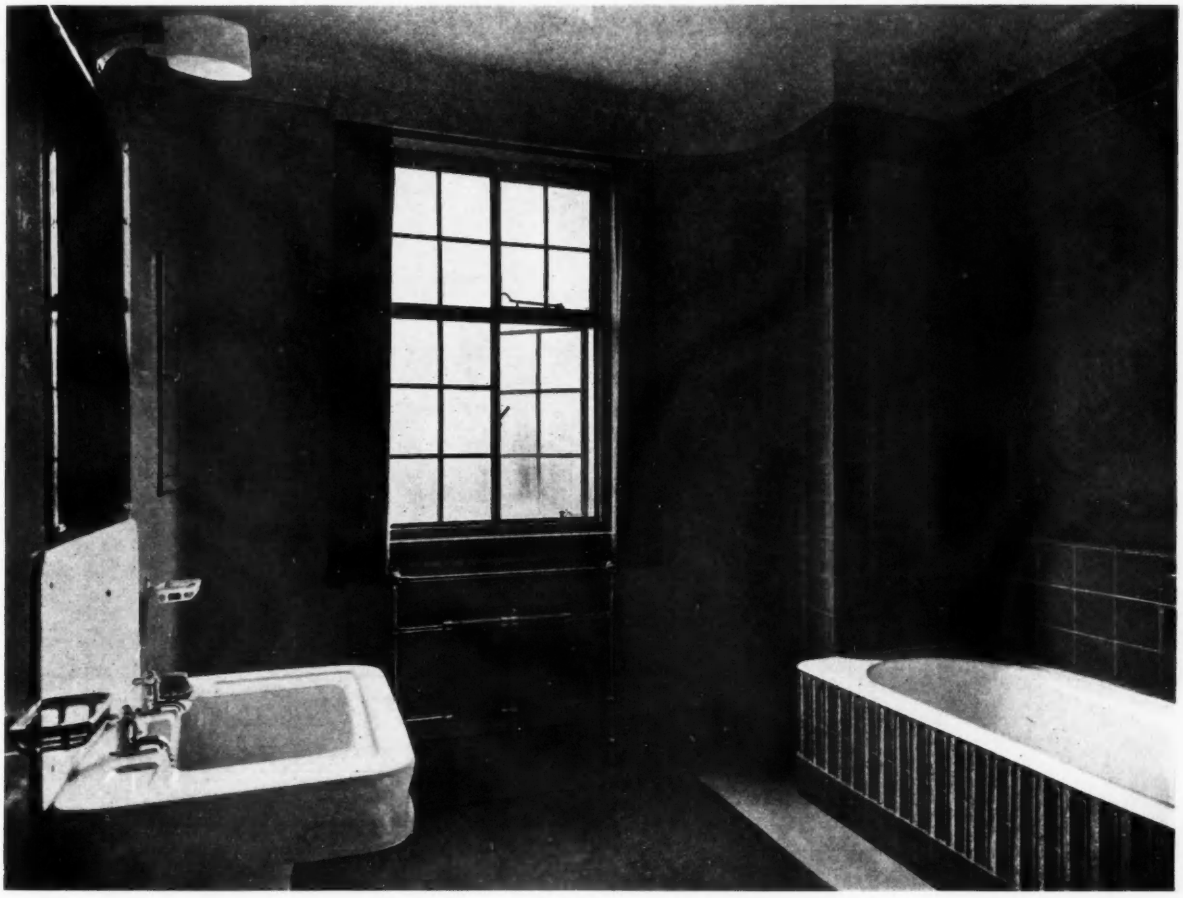
The measured work price is on the same basis . . . per ft. sup. £0 0 2½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3*d.* to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

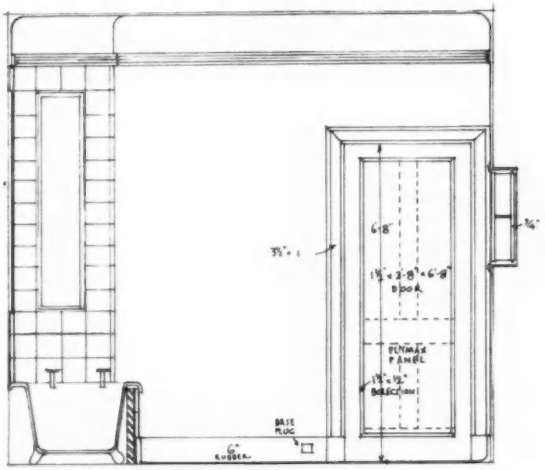


NEW BATHROOM: No. 9 LANSDOWN CRESCENT, BATH
BY
E. MAXWELL FRY
(Adams, Thompson and Fry)

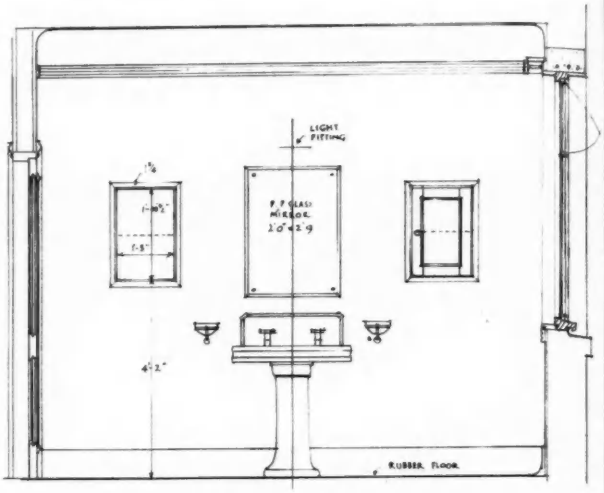
IN a typical Georgian house, recent renovations included the designing of this bathroom and its adjuncts, as indicated in the working drawings reproduced on the following page.

The bath is set back in a tiled recess, with coved wall-corners on either hand, and is itself fronted with fluted tiles. Central, above the bath, is a sunk soap-holder. In the opposite wall are two sunk cupboards, either side of the lavatory basin and mirror, which is surmounted by an electric lamp.

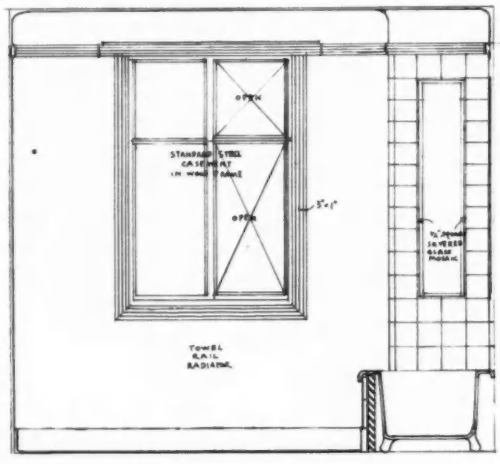
The walls are of hard plaster, painted a pale aqueous green that matches the tiles. Bordering the panels, and dividing the green fluted tiles, are ½-in. strips of silver glass mosaic. The floor is covered with rubber, of the same green, with a white surround; and the curtains to the standard steel casement window are of oiled silk.



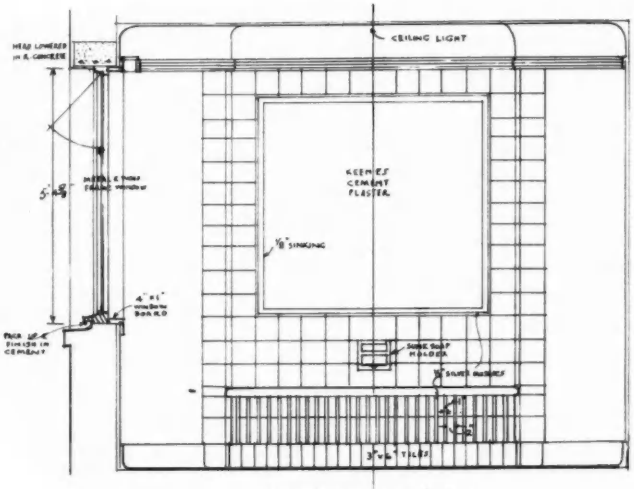
SOUTH WALL



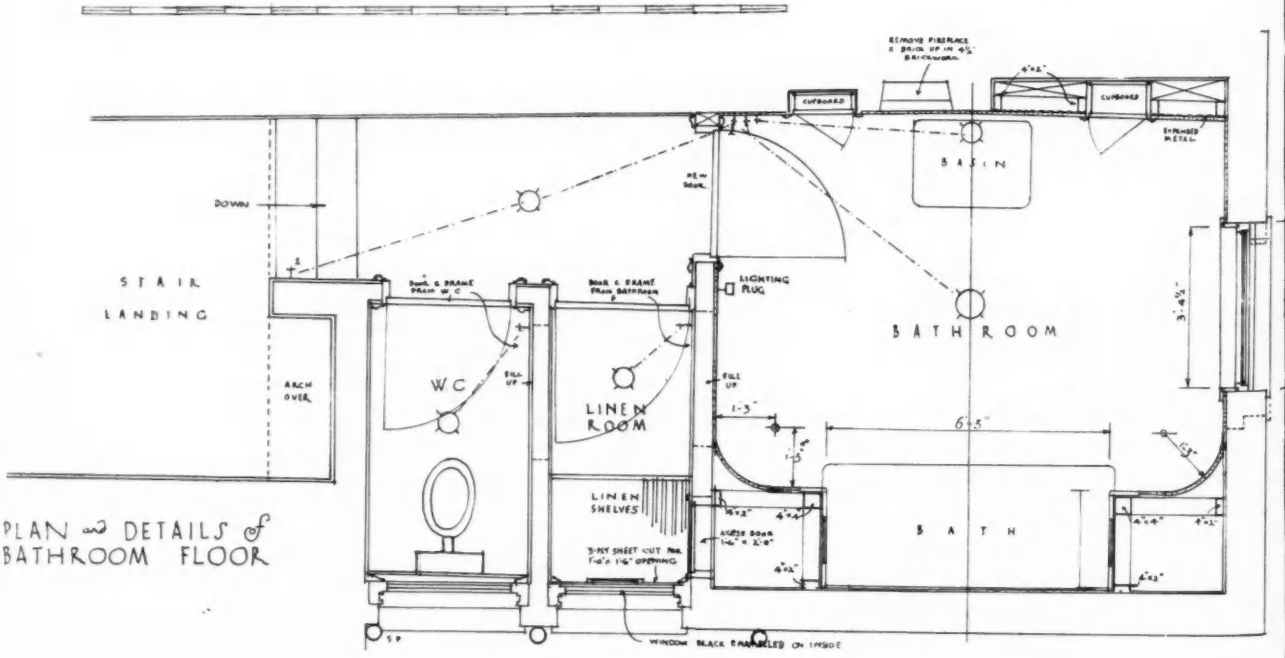
WEST WALL



NORTH WALL



EAST WALL



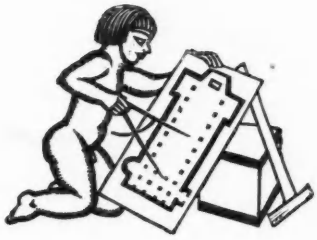
PLAN and DETAILS of BATHROOM FLOOR

ALTERATIONS to No 9 LANSDOWN CRESCENT · BATH

By E. Maxwell Fry (Adams, Thompson and Fry).

[For photograph see preceding page.

THE ARCHITECTS' JOURNAL



WEDNESDAY, MARCH 5, 1930

STEEL STATIONS ON THE STEEL ROAD

A Moral from the Good Old Days of Railway Architecture

THE illuminating address which Mr. Frank Pick delivered at the Royal Institute of British Architects on Monday serves to remind us that the development of transport has an extremely important bearing on architecture, and the buildings which have been associated with the railways in particular have invariably acquired certain characteristics of their own. Mr. Pick's references to the work which has been done in connection with the London Underground stations was of great interest to architects, but it may be suggested that in some respects the hey-day of railway architecture was at the beginning of the industrial era, when the high standards of architectural taste established in the eighteenth century and maintained to the Early Victorian period were still respected even by members of the rising profession of engineers, then for the first time beginning to separate themselves from the body of architects.

When the Great Western Railway Company laid down its main line it was with infinite care that Brunel, the elder, and his collaborators designed the new bridges, many of which to this day remain models of elegance. Visitors to the picture galleries in the corridors of the Great Western offices at Paddington can inform themselves concerning these developments and may, perhaps, be astonished to discover how deeply concerned the engineers were with the qualities of landscape architecture. Skilled water-colourists were employed to portray the natural scenery through which the new railway traversed, and obviously the directors of the gigantic project to take a steel railroad for a distance of over 300 miles were keenly alive to the æsthetic aspect of their activities, and were prepared to make a great effort to ensure that the new railway should be beautiful as well as useful.

Not only the bridges but also the stations which were built at the very beginning of the railway period were well designed, and it was only when the general architectural rot set in that the ugliness which, unfortunately, we still associate with the average railway station made its appearance. In spite of this, however, there resulted several imposing structures which, although they date from what is now considered to be a bad period of architecture, are not always justly appraised by critics. The great iron spans of Paddington and St. Pancras stations have a truly artistic quality, and, indeed, display a more acute perception of the decorative possibilities of steel than do nine-tenths of the modern structures in which that material is employed. And, after all, there is a certain artistic appropriateness in the use of a steel building as the terminus of a steel road, and while it may be desirable that the entrance front to a station should be faced with stone in order to show its affinity to the buildings near it, the design has certainly an added expressiveness if above this stone portion of the façade we have a glimpse of the iron roof of the station itself.

It is well to remember that a railway station, and even a principal railway station in the metropolis, is a symbol of something which, although important, is yet strictly utilitarian. Railway transport is a means to civilization rather than one of its ends, and for this reason we should guard ourselves against a certain tendency which has manifested itself during recent years, namely, the tendency of railway stations to display an architectural pomposity which ill befits them. The Pennsylvania Railway station at New York, for instance, although it is a fine and monumental building, ought surely not to have assumed a grandeur which surpasses that of any other building in the city. That seems the wrong kind of architectural path for the railway station to tread.

While giving to our modern railway stations whatever excellences in design would be considered to be the special product of our own age, we cannot afford to ignore certain features of past railway development which are especially worthy of our admiration. Let architects and engineers of today emulate the example of their forbears of the mid-nineteenth century in the matter of bridge design, and let them also turn their attention once more to the architectural possibilities of steel, and the railways will contribute to an important revival in the structural arts. Our ability to take advantage of a great opportunity will be tested when the new Charing Cross Bridge and Southern Railway Station are built.



ELECTRA'S GOSSAMER DRAPERIES

A spark at about a million volts, photographed in the new high voltage laboratory of the National Physical Laboratory, at Twickenham. The apparatus is housed in a special building, designed by F. A. Llewellyn, of H.M. Office of Works, and recently completed. Three transformers are employed, the primary current being of 500 ampères at 1,000 volts; the high-tension current is therefore of about half an ampère. *(A review of the last report of the National Physical Laboratory's work, for the year 1928, appears on page 402.)*

NEWS & TOPICS

ARTS ALLIED TO ARCHITECTURE

PROFESSOR LIONEL BUDDEN's plea, last week, for a closer association of schools of architecture, of painting, and of sculpture, is timely, for there is undoubtedly a growing desire on the part of a certain section of painters, and especially of sculptors, to work to definite architectural programmes. And, on their part, despite the modern vogue of plain and severe surfaces, many architects would be only too glad to welcome the co-operation of the major allied arts, as they do the minor crafts, could it be given with understanding and as an integral part of their theme; not applied as so much adventitious adornment. Professor Budden again exposed the fallacious influence of Ruskin and Morris in this connection. For them architecture was merely a pretext for the display of painting and sculpture in their own several rights. A swing of the pendulum was inevitable, and has, in fact, in our day, come somewhere near effecting a complete cleavage between the three allied arts. It is time they were reconciled on a basis of common understanding.

THE PART OF SUNLIGHT IN COMMUNAL LIFE

It is only occasionally that one sees the seamy side of America's cloth of gold. Visitors from England take too long to recover from the first shock to be as competently critical as a really critical American can be. Mr. Lawrence Veiller, as becomes a city planner, is critical enough to wonder whether the skyscraper is not, after all, an unhealthy manifestation of greed, and a source of real harm to those whose days are spent under its long-cast shadow and in the comparative gloom of its lower stories. We who in England enjoy, as the lawyers have it, the right to a fairly reasonable modicum of direct sunlight, can hardly realize how injurious the effects of high building may be in a country like America, where " light " was not a thing recognizable in law until the relatively useless zoning laws of New York were instituted.

*

And not only in New York but in Berlin, Paris, and other capital cities, high building means deep shadows, little sunlight and a steady manufacture of rickets and tuberculosis. We have been saved from the worst of these conditions, but we move steadily backward as high buildings multiply, and the question of direct sunlight and communal life must again be made the subject of our very earnest inquiry. At the moment further improvement is hardly practical politics, which is wrong.

*

So also with noise, bearable enough in the days when traffic was measured in the clip-clop of horses' hoofs and the roll of iron wheels on stone roadways, but another matter since wheels were made to revolve rapidly and the semi-internal combustion engine was invented. People imagine that we grow used to noise; that it becomes a part of one's life, and affects us very little. To a certain extent, of course, this is true, but experiments being carried out in America seem to prove that noise occasions reactions in the brain of corresponding violence, and that there is no reason to believe that the brain becomes hardened to repeated or continuous shock. I myself know, working in my office on one of the great traffic streets, how much easier it is to concentrate when once the infernal roar of motor cars has died down to an occasional rumble. No further experiment is necessary.

ANOTHER " CAUTIONARY GUIDE "

The Design and Industries Association went about their job in the right spirit when they issued *The Cautionary Guide to St. Albans*. The shopkeepers of St. Albans were very annoyed about the Cautionary Guide, which shows how accurate was the aim. The D.I.A. have now shot another bolt, this time at garages and those who own them. *The Village Pump : a guide to better garages* is an excellent piece of pamphleteering, that uses photographs on the same comparative system, showing the bad and the good of it. One of the bad ones is reproduced here, so that one may imagine how finely the old brick wall came into its own again after Shell had decided to remove all their enamel road signs. In the booklet are to be found some very good garages, and others in such varying stages of goodness that there will be no garage-owner, be he ever so humble, that will not find his stimulus towards better things on one page or another.



An illustration from the D.I.A.'s latest pamphlet, " The Village Pump." The Shell firm removed this sign some time ago.

TOWN-PLANNING THE PAPAL CITY

There is something rather amusing in the idea of town-planning in the Vatican city. It covers 109 acres—the area of an average-sized village—and contains, besides St. Peter's itself, a railway station, courts of justice, a wireless station, palaces and other buildings. The station is no great affair as stations go, since it will be used but three or four times a year, but one imagines that the wireless station is of immense importance. The reconstruction is very thorough, and will entirely alter the appearance of the district now included within the Papal city. A thousand workmen are being employed, and for the next few years they will outnumber the regular inhabitants by two to one.

MANCHESTER FORGES AHEAD

Manchester used to have rather a bad name among architects who go in for open competitions. One never felt certain that the building would be built. Mr. Ramsay MacDonald will inaugurate a new era in more senses than one when he lays the foundation stone of the new Town Hall extensions which Mr. E. Vincent Harris won in open competition. It will be remembered that his library

scheme, which is the greater part of the extension, took the form of a great rotunda. It will be unquestionably one of the finest civic buildings in the country, and I cannot help feeling how badly provided is Manchester with sites fit for buildings conceived as this is, in the really grand manner.

CARPENTER, SPARE THAT TREE !

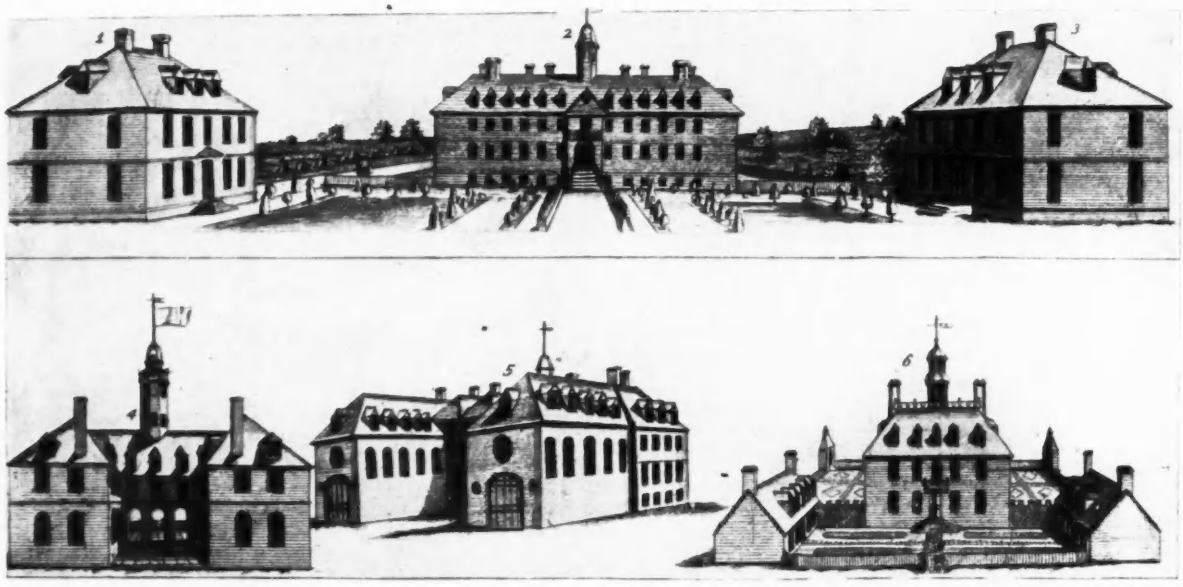
There have been complaints from responsible quarters that tree felling and pruning in the London squares is carried out with a liberal but untrained hand. Branches are lopped in the name of safety in such a manner as to destroy the balance upon which their safety depends; tree wounds are left undressed until the weather has poisoned them, and other treatment of a similar nature plays havoc with the fine growths which so much help to make the squares and open spaces of London the restful havens they are. Mr. Basil Homes suggests that no scheme for felling or lopping trees in London should be undertaken without advice from the one competent authority—namely, the Director of the Royal Botanic Gardens at Kew. At least this authority might issue a statement on the essential principles involved, which those who are responsible for all kinds of open spaces might follow.

LE CORBUSIER'S LOGICAL ANALYSIS

It is peculiar that the ideas of Le Corbusier, so universally acceptable to Continental designers, should have received so little popular appreciation in this country. There are those who agree with his ideas in a general sort of way, have put into modified practice certain of his principles, and have written in his praise in the technical press. But the public at large meets him at fourth hand through bad shop designs, and over his real teaching there hangs what seems to amount to a professional taboo; as though not believing it possible to go the whole way, architects were of the opinion that it were safer to forget about him. This is manifestly a wrong way of regarding his very valuable contribution to modern architecture, and there does surely exist a reading of his logical analysis which will lift architecture in this country from the historical complex which damns it in the eyes of the world, without landing it into the extravagant stylism from which our insularity is in revolt.

A WREN BUILDING IN NEW ENGLAND ?

How much of the original colonial architecture of the Southern and New England States of America can be directly ascribed to well-known architects practising at that time in London is an interesting but debatable point. I believe that James Gibbs designed a church or churches in Virginia, but I have never heard of corroborated evidence pointing to examples of Sir Christopher Wren's work being found in those parts. As it is difficult enough to be certain of what was his out of a mass of contemporary work here, his name is likely to be associated with buildings in America merely because it was familiar to laymen as that of the leading architect of the day.

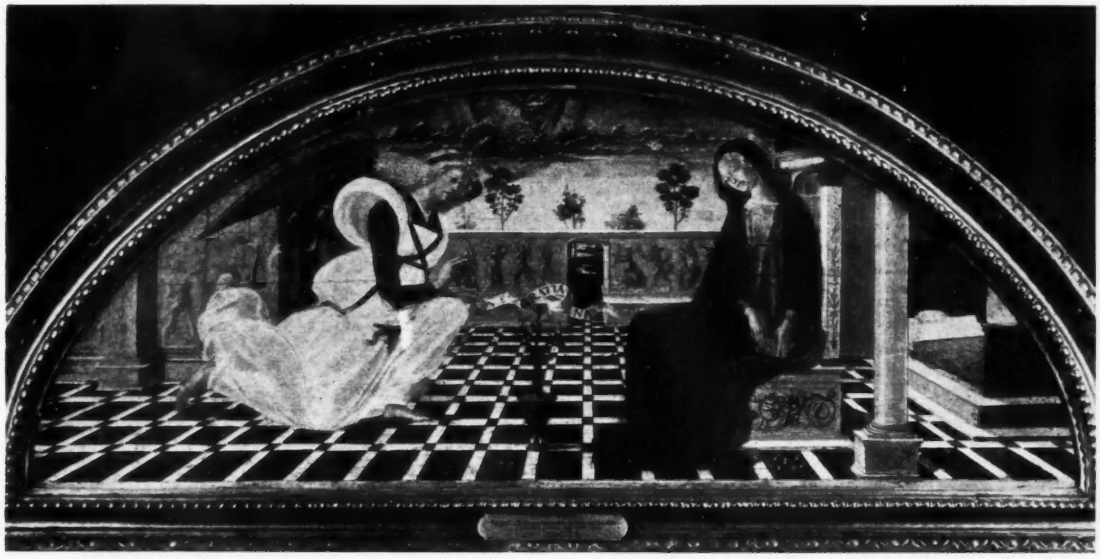


Original civic buildings in Williamsburg, Virginia: 1, Brafferton, America's first Indian school; 2, William and Mary College (1695); 3, The College President's House; 4, the Colonial Capitol; 5, rear view of 2; 6, Governor's Palace.

*

It is therefore the more interesting to know that the town of Williamsburg in Virginia is conducting research in this country with the object of discovering the authorship of its original civic buildings. Miss Mary F. Goodwin has brought to light the print reproduced here after long searching in the Bodleian, and has asked in a letter to *The Times* of February 27 for any information that may help to place it as being an illustration to any known work. In America these original buildings are regarded, on the evidence of an old book entitled *The True Relation of the Seven States of Virginia*, as being by Sir Christopher Wren. Their faint resemblance to Chelsea Hospital strengthens the belief, though in point of fact the similarity is in a general arrangement too common to give grounds for the assumption, and there is unfortunately insufficient detail in this guide-book print to take one very far. It is a great find, nevertheless, because Williamsburg wants to rebuild its historic buildings, and these are certainly good architecture.

ASTRAGAL



NEROCCIO

THE ARCHITECTURE OF THE ANNUNCIATION

Musings at the Italian Exhibition at Burlington House

BY RAYMOND McGRATH

JUST as the modern painter is content to express his beliefs and aspirations in the nice forms and colours of a still life, in bunches of celery, fish, apples or nautical instruments, so the Italian Renaissance painters found a most adequate satisfaction in Christian or Classical themes or in combinations of both. There is an infinite variety of variation on any one theme. The elements which compose the theme of picture or building are almost unlimited. In this simple arithmetic lies the secret of the perpetual appeal of art, as of all things that make life worth living. Certainly there are some simple forms to which all complexities owe their final appeal. Therein lies the artistic subtlety. Great artists have a way of transforming the simplest things into great and apparently complex things by the simplest of means.

No discerning person, however, is misled by the mere qualities of decoration, though in the worst periods moss and leaves are most often mistaken for the ultimate wood. Today, the abuse of decoration and a preoccupation with trivialities have brought about the inevitable reactions. The result is a crusade for simplicity, even for naivety, the desire for good wood and less moss round about our feet. Stupid people, confronted with simple, satisfying things, often rejoin : " This cult



DOMENICO VENEZIANO



FRANCISCO DI GIORGIO MARTINI

of ugliness! You like ugly things?" And the truth is that they secretly believe that simplicity is an easy thing to achieve, and therefore a despicable thing. That is one of the reasons why so many people always prefer Renaissance or Gothic architecture to any recent attempts at simplicity. They can *see* something in Notre Dame or St. Peter's, columns and statues in fact, thousands of them, very often. Therefore this *is* architecture. My argument is not that simple buildings excel over enriched ones. Enrichment is merely not our modern strong point. We have little time in which to enrich them. That is a good reason why we should strive for the utmost subtlety in unenriched forms.

Today it is our constant surprise to see with what sureness the Italian Renaissance architects and painters were able to decorate their buildings and canvases. Only a very occasional modern can indulge with impunity in the intricacies of detail which were child's play to Botticelli or Ghirlandaio. This is the lighter side of the variations on any chosen theme, but none the less a mark of the great artist, a real test of the trustworthy artistic imagination. If we might call imagination the intuitive mathematics of the mind, then the fifteenth-century Italian painters were superbly artistic mathematicians.

Our six Annunciations here illustrated all belong to the fifteenth century, that enviable era of spiritual geometry in architecture and in painting. It was plane rather than solid geometry upon which both arts were based. A glance at them reveals that all these Annunciations owe their beauty primarily to line, and of course to the colour which is here lacking. This is particularly the case with Veneziano and Botticelli, who concentrate your appreciation with uncompromising strokes of ruler-like precision.

Let us examine these paintings in detail. Personally I give pride of place to Francisco di Giorgio's Annunciation. This is the Sienese school at its best, the work of a painter who is both scientific and romantic, of a dreamer in the new world. It is in tempera on wood, and whatever its original state, it now possesses a surprisingly beautiful atmosphere of mother-of-pearl. Its pastel softness of



ALESSANDRO BOTTICELLI



FRA FILIPPO LIPPI

colouring is given greater delicacy by the brilliance of the reds. The arches of the loggia are red, and so is the Virgin's blouse. Her robe is ultra-marine-purple. Behind her rise the impossibly slender pink marble columns of the arcade. The blonde angel almost floats upon the elaborate pavement. Her wings are blue, her robe purple-blue. There is a delightful intimacy about this Annunciation, which is enhanced by the romantic landscape beyond, by its trees and precipice.

This, and the other Sienese Annunciation of Neroccio are the two most romantic of the six. Neroccio's angel floats over a still more elaborate pavement of black and white marble. She has grey-blue wings, a mass of blonde hair, and a dress of delicate pink, with snake-like ribbons. (The six angels and six Virgins of these pictures are all fair.) The Virgin has a blue, almost black, robe over crimson. The architecture is all a grey-white marble, with exquisite reliefs, and the sky is rain-washed cerulean blue. The most brilliant touches of colour are the red of the bed and of the glory of God the Father in the sky. Neroccio's Annunciation was lent for the exhibition by the Yale University of America.

Three of our other Annunciations are Florentine, one Venetian. Botticelli's Annunciation, from the Glasgow gallery, is most unlike his other works exhibited. It is the sort of Annunciation I imagine Brunelleschi would have painted. This is his architecture—the supreme Tuscan sensibility. Botticelli's conception is dramatic and sombre. It has that still, grey atmosphere which prevails before a thunder-storm.

Through the arcade are the dark hills and a sheet of water under pale sky seen flecked with clouds. There is grey shadow on the walls and under the vaulted ceiling. The white-winged angel approaches across a plush-red floor, and from above her head the gilded rays of glory seek out the Virgin. Botticelli's treatment is monumental, arresting.

In complete contrast to this grand setting we have Fra Filippo Lippi's homely interior. Here, in her room, the Virgin takes the lily from the angel's hand, in the unusual presence of



VITTORE CARPACCIO

two donors. The Virgin has a cobalt blue gown. The angel's robe is black. The wings are black, relieved with gold. Otherwise the walls are pale grey and the parapet, behind part of which kneel the donors, is a warm amber. Outside, the landscape is in sombre greens. The rays and haloes and other details are illuminated with gold. Filippo Lippi paints with simple grace, delighting in all enrichments, with a rare success.

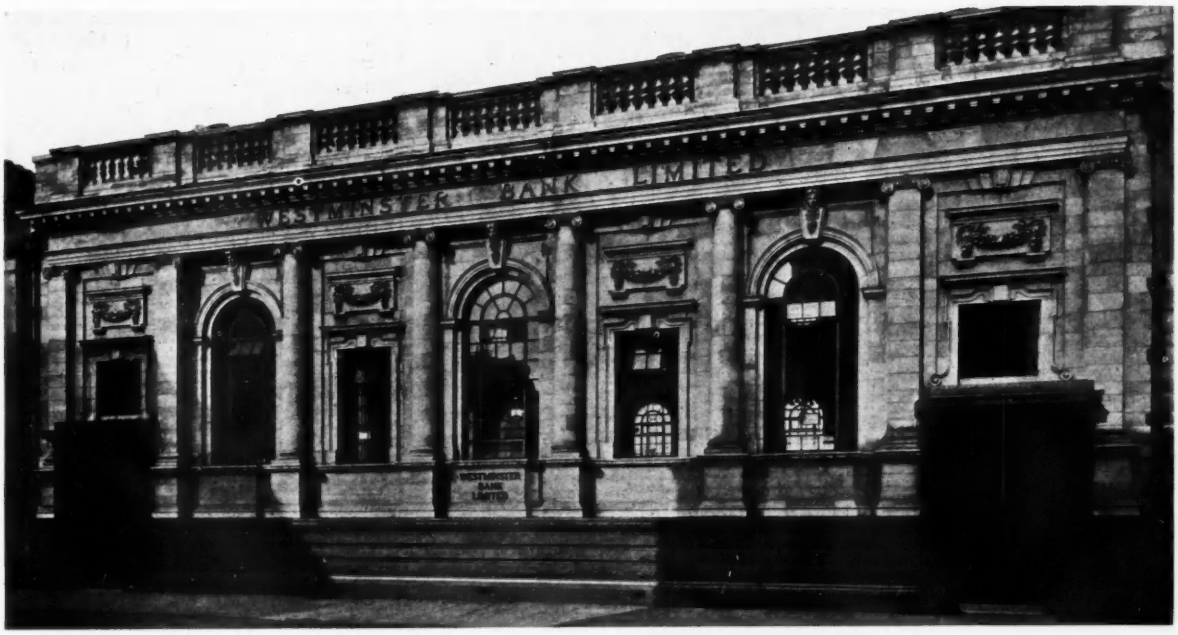
Domenico Veneziano's Annunciation is severely classical and intentionally archaic. In colour it is Pompäean. Here the blues and crimsons of angel and Virgin are against cool grey walls in a courtyard where crisp white columns support deep-rose coloured cornice and architrave and a frieze of dark blue. The ceiling of the colonnade is a dark blue. The caps and bases of the columns are red, and the pavement is Venetian pink with grey borders. Through the archway are warm orange walls and a rose trellised garden. There is the sunny glow of summer in the air, within and without. How is it that people who enjoy the colours of the architecture of Italian pictures can still be content to live in monochrome streets? We are afraid of colour except within the traditional bounds of a safe frame.

Carpaccio's Annunciation, lent by the Cà D'Oro, is frankly pagan. Peacocks, arabesques, and fantastic carvings are here the Virgin's environment. Humour is not lacking. The angel might well appear to be abstractedly plucking petals from the lily, and God, in a red robe, above the garden gate, miraculously juggles with six pink-faced cherubims, as the Holy Spirit flys down in a golden beam. The colour of the picture is rich and sombre. It is the only one of the six painted in oil, all the others being in tempera. The exhibition as a whole is in fact an eloquent proof of the superiority of tempera over oil, so much so that the present neglect of this medium is difficult to understand, now that impressionism is on the wane. Oil is, of course, the medium for the impressionist, and Carpaccio himself was a modest forerunner of impressionism in painting.

Architecture plays a very prominent part in Italian Annunciations. The Renaissance painter revelled in and understood the forms which are of such value to his designs. Modern architecture holds no such place in modern painting, and it is equally noticeable that modern painting has little or no place in modern architecture. Perhaps this wealth of Italian suggestion will inspire us!

A SINGLE-STORY PROVINCIAL BANK BUILDING

DESIGNED BY BRIERLEY AND RUTHERFORD



The main street frontage, some eighty feet long, is faced with Portland stone, above a plinth of Aberdeen granite.

THE new premises for the Westminster Bank, Ltd., at Doncaster, Yorkshire, here illustrated and described, possess distinctive features in the length of the main frontage; the one-story treatment; and the concentration of practically the whole working space within one lofty hall.

ONLY in the case of a site which is both in a provincial town and in the possession of wealthy owners is the opportunity likely to arise for the design as a single-floor structure of so large a building as this bank. A feature of the exterior is the single range of large windows, raised above pedestals, with a high plinth, unpierced by openings, save the doorways, which occur at each end of the front. This treatment indicates at once that the building is of the single-story type, and that the banking hall extends throughout the full height of the interior above the ground-floor level.

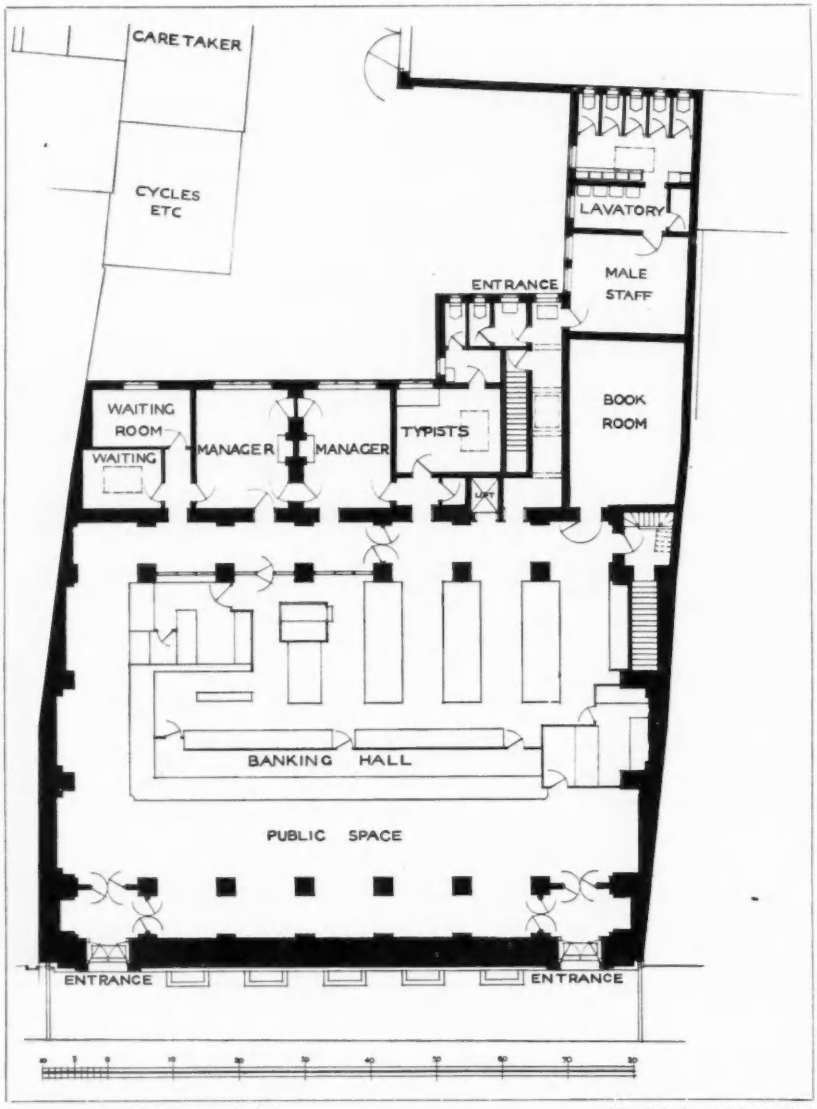
The classical treatment of the façade has been adopted to harmonize with the note struck by the civic Mansion House on the opposite side of the street, which was built by James Paine about the year 1745. Variety has been introduced by the alternation of arched and square-headed windows, a device of which San Michele was a notable exponent.

The bank is to be congratulated on having allowed the architects to take advantage of the opportunity which the absence of upper floors affords for designing an interior of striking proportions.

This interior is occupied by one spacious aisled banking hall, measuring about 90 ft. long by 45 ft. wide within the colonnades. Practically the whole work of the bank is carried on in this large hall, the only adjuncts being the private offices for the manager, the waiting-



The central window of the main front, taken at closer range, to show details of the stonework and inscription.



Westminster Bank, Doncaster, Yorks.] [*By Brierley and Rutherford.*

The architects' drawing of the ground-floor plan. Practically the whole of the banking business is transacted in the one spacious hall.

rooms and typists' rooms—low buildings at the back under the main sill level.

The height of the external and internal orders is the same, and this is an indication of the consistency with which a classical motif has been pursued throughout the building.

The principal front, above the external plinth and doorways, which are of Aberdeen granite, is faced with Portland stone. There are sculptured keystones to the arches and other enrichments; for the carving and modelling James Walker, of London, undertook the responsibility. The windows are of bronze. Floors and roofs are constructed of reinforced concrete.

On the interior walls are dadoes of Nabresina marble and Belgian fossil.

CORRESPONDENCE

The Charing Cross Bridge Scheme

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—It would be a pity if the impression got abroad that the profession is entirely behind the R.I.B.A. in its action in connection with the Charing Cross Bridge Scheme, for when the plan of Sir Edwin Lutyens is published, I am sure it will find many warm supporters, and many things will appear in a different light.

The Institute has done much useful work in the past in connection with bridge-building. Its activities have succeeded in impressing upon the mind of authority the idea that a bridge should not be regarded simply as a piece of construction, to be left to the tender mercies of the engineer, inasmuch as bridge-building has an architectural as well as an engineering aspect. And, what is equally important, it has been instrumental to some extent in ousting steel bridges in favour of stone ones.

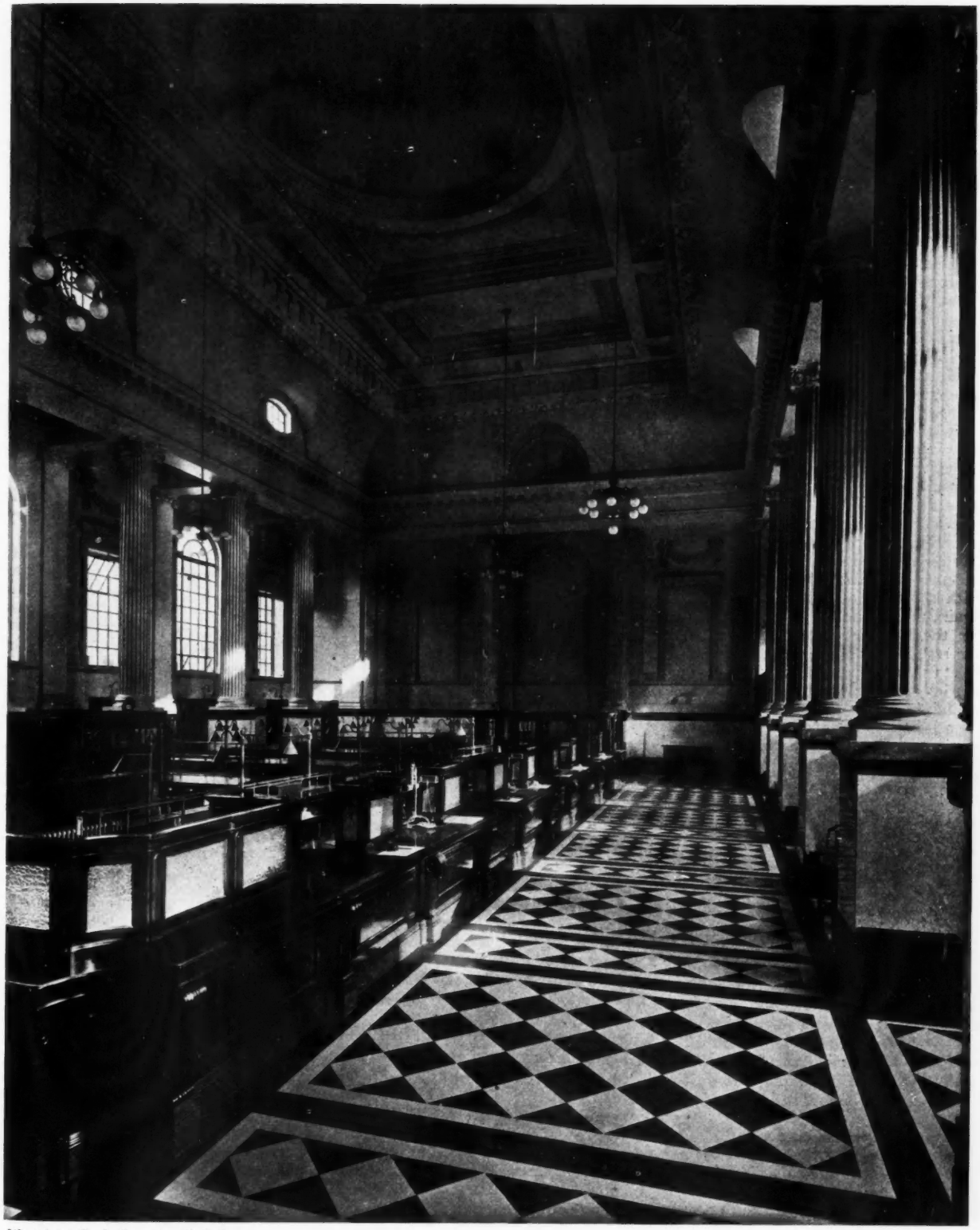
Nor did the Institute stop there. It not only brought stone bridges back in favour but it nominated the architects to design them. And, though I am far from thinking that the architects chosen were always the best for the work, there is this much to be said in their favour—it is probable that much better architects were appointed to design these bridges than if the R.I.B.A. had not intervened.

While the useful work of the Institute as an advisory body is not to be questioned, it becomes presumptuous in them to interfere when there is appointed by the Government an architect of outstanding ability like Sir Edwin Lutyens. For, after all, the aim of intervention in the past was entirely to ensure the appointment of architects such as he. The Institute therefore has put itself in a very invidious position by its recent ill-timed interference, and it will have to tread very carefully if the whole controversy is not to become for it a veritable *pons asinorum*.

But what of the actual scheme? Are the criticisms of the Institute committee justified? I think not. So far as traffic considerations are concerned, the main lines of the scheme were determined by the Ministry of Transport and a committee of engineers before Sir Edwin Lutyens was consulted. Nevertheless, it is foolish to suggest, as Mr. Keen did in his letter to Sir Edwin, that the latter had not a free hand. For Sir Edwin completely recast the scheme of the engineers in detail, and in its final form it may certainly claim to be a triumph of civic design.

That the town-planners connected with the Institute should be entirely blind to this is easy to understand; for they always walk about in seven-league boots, and would, presumably, overlook the merits of anything designed on a more human scale. Yet it is just because Sir Edwin's plan is so entirely right in scale that it is so peculiarly successful. Civic design, according to the pundits of the Institute, is a matter of axial lines, circuses or roundabouts, and slick draughtsmanship; and so it is but natural that they should see nothing in a design which ignores their pet canons. But that does not condemn the design. It merely makes us aware of the gulf which separates their thought from that of Sir Edwin Lutyens.

The bridge is to be a high-level one,



Westminster Bank, Doncaster, Yorks.] [*By Brierley and Rutherford.*

A general view of the banking hall, taken from a slightly elevated viewpoint in the public space, so as to show the disposition of counters, partitions, etc. The main street front is to the right of the spectator, and under the windows in the wall opposite to it are doors leading to the managers' rooms and subsidiary offices, which are housed in a low annexe on the rear portion of the site.

which will go over the Embankment, like Waterloo Bridge. That is one of the things to which the Institute committee objects, on the ground that it is desirable that access be had to the bridge from the Embankment. But is this a valid objection? Access from the Embankment would mean a low-level bridge, and that would mean a hill to climb to reach the Strand level. And as the traffic from the Embankment to the bridge would be negligible compared with that to the Strand, to make the bridge a low-level one would be to sacrifice a major purpose for a minor one.

In any case, a low-level bridge is out of the question, as the Southern Railway have made it a condition of their co-operation that the road of the bridge be at the platform level of their station.

Moreover, as a high-level bridge offers far greater architectural possibilities than a low-level one, it is not easy to see why a body which exists to promote the interests of architecture should object to it.

Another objection of the Institute committee is to the position of the new station, which comes up to the river, because, they say, it involves a long plain wall at the side. This is not necessarily the case; it could be flanked with shops or other buildings. And, again, there is no option in the matter, for the Southern Railway insist that the station shall be in this position.

Let us consider the architectural possibilities of the plan. You will not look to infinity, but the vista will be closed by a building about on a line with the National Liberal Club, while the road will bear to the right. On arriving at the Strand there will be a square or, to be more correct, a diamond, which, at the same time, provides a happy solution of the traffic problem, and of the problem presented by Duncannon Street and the other streets which are at right angles with the side of Trafalgar Square and not with the Strand. I should like to dwell on this feature of the plan for a moment.

Most architects and town-planners, I suppose, would have sought a solution of this problem by the provision of a circus, which appears to cover such a multitude of sins. It is so easy to strike a circle with a pair of compasses and it looks so well and workmanlike on the plan. But in execution it is ugly. A circus is the worst imaginable way of effecting a junction of streets, because what you really get in execution is not the circle which looked so nice on the plan, not even a crescent, but small segments of circles, which do not explain themselves. For it is impossible to see more than two at a time, and as these are separated by a wide street the eye does not complete the circle which is the essential condition of its pleasing. Experience proves it impossible to make the buildings which abut on a circus really satisfactory; there is nothing to be done with a site with a small segment taken off the angle. Go and have a look at Oxford Circus and take warning.

The truth is that the plans which are nowadays served up to us by town-planners do not explain themselves. It would be necessary to live in an aeroplane to appreciate them, for they are obviously designed to be looked at from the air. Most of us still spend our time on the ground, and I, for one, strongly object to town-planners catering entirely for airmen.

This is only another way of saying that in the town-planning of today the scale is invariably too large. The right way to design large civic schemes is to consider how much can be seen at a given time, and not to insist upon axial lines and circles, which have become an obsession with town-planners. And I confess it is largely because Sir Edwin Lutyens will have nothing to do with such nonsense that I am so attracted to his design. There are things which appear on drawings which are not really seen in execution, and things which bulk largely in execution that make little show on drawings. Sir Edwin Lutyens has not overlooked this. As his plan is examined in detail it will be seen that the various parts lend themselves to beautiful architectural treatment. He appears to have actually walked down his streets and considered every little corner and detail instead of flying over them in an aeroplane. I am intrigued especially by a wonderful effect that will appear from the Embankment when looking in the direction of the Strand. There will be the pile of buildings that close the vista from the bridge, resting on a massive base, with, perhaps, a staircase leading down to the Embankment. It has wonderful possibilities, and no doubt Sir Edwin Lutyens will make the most of it, as he will when he turns to the design of the buildings on the river front on the Surrey side, which, appearing above a high-walled embankment, will be highly effective.

PONDERIVO

The Æsthetic Front

To the Editor of THE ARCHITECTS' JOURNAL

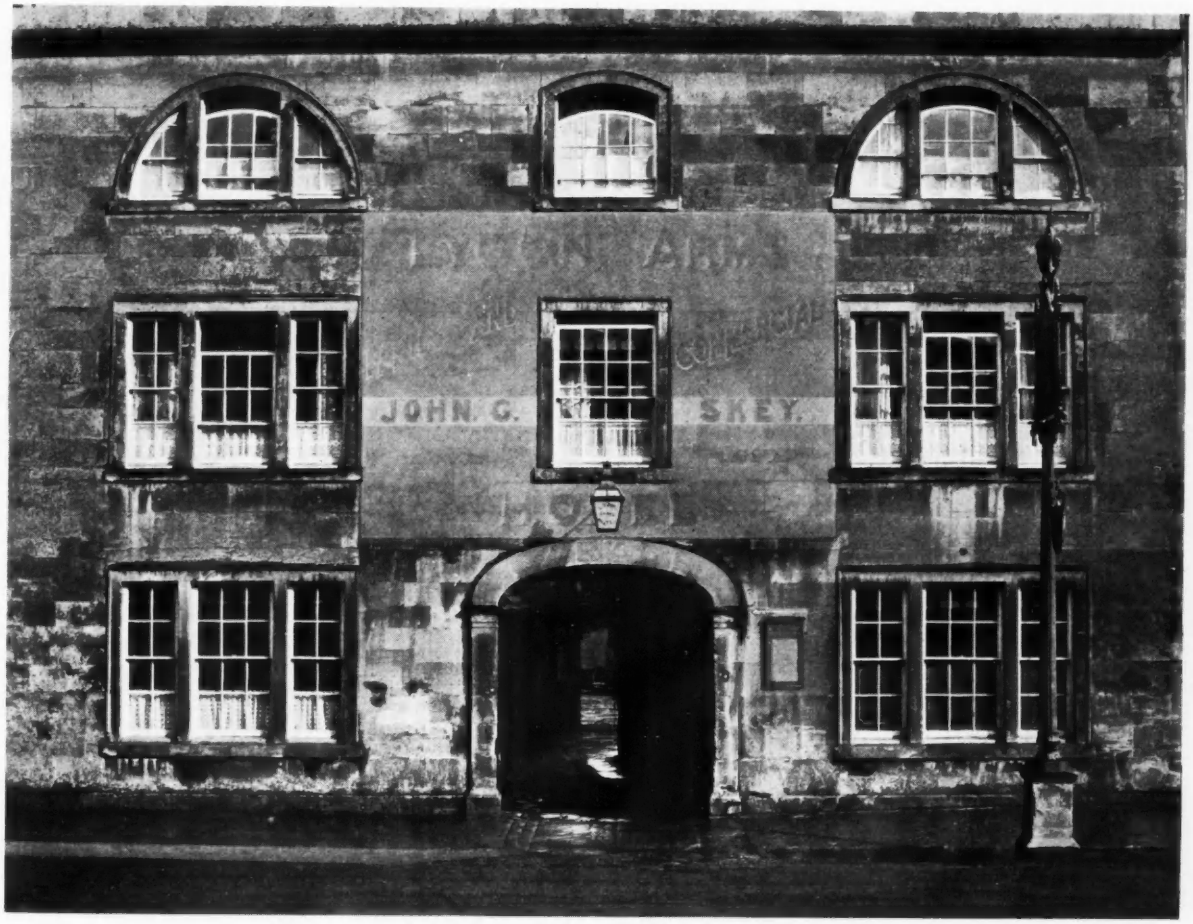
SIR,—I do not think there is any bird in the architectural cockpit to whom I am so entirely hostile as my friend Mr. Trystan Edwards; and I dare say he feels the same towards me. We do not, I hope, think any the worse of one another on that account, for I have no doubt whatever that God made Edwards and, I believe, He made me; we are both earnest and both sincere; we are each entirely independent. This, however, is all we seem to have in common; and if there is anyone in this world whose sense of architectural decency is so ruffled as mine is by Edwards's reference of æsthetics to the test of logic and rule, I should be glad to meet that person and share his grievances over a week-end.

Mr. Edwards expresses strong objection to the view " that good architecture results from good construction and from what is called *the expression of fitness for purpose*," and comments: " If these are the only desiderata in architecture, why not let the builders and engineers assume our professional duties and let the architectural profession commit hara-kiri at once? " The italics are mine : and my answer to the question is, that builders are incapable of giving *expression* to fitness of purpose in a building or to anything else. Now this is the particular purpose for which an architect exists.

The precautions taken by those responsible for the drafting of the Registration Bill, to secure that no coercion of architectural taste, nor restraint of architectural fancy, shall result from it, is, in my opinion, no less than necessary if the Bill is to find favour with our legislators. Does Mr. Edwards really suppose that, even if not necessary, architects themselves would support a Bill the purpose of which was to dragoon their fancy. He actually cites other arts in support of his recommendation of a policed art of architecture. Has he forgotten what an art, in fact, is—what the impulse of the artist consists in? He seems to suppose that schools of art are concerned to teach art. I venture to say that there is not one principal or assistant in any school of art in the country who would not repudiate any such idea with indignation : art is precisely what they try *not* to teach; their endeavour is to teach technique—the mechanism of performance—and particularly to encourage individuality of thought and feeling. The one all-pervading common impulse of every artist is never to repeat himself. Yet Mr. Edwards proposes that the welfare of the art of architecture depends upon restraining and coercing that impulse. Taste is a thing which develops, changes, and has reactions just as does the work of the individual artist. The word itself intimates choice and selection; and the very matter of that choice is always changing. In spite of this, Mr. Edwards would determine once and for all a physical rule of form and proportion which is to establish good taste as a fixed, measurable quality. Obviously, directly he accomplished this impossibility, taste would cease to exist; for all opportunity for discretion and choice, upon which taste depends, would be destroyed.

I am reminded of a dictum of Matthew Arnold : " Poetry is the essence and finer spirit of all knowledge." In my thought architecture is the poetry, not the science (or knowledge) of building.

H. B. CRESWELL



ENGLISH PRECEDENT No. 105

THE LYGON ARMS, CHIPPING CAMPDEN, GLOUCESTERSHIRE

This building, not to be compared with its namesake at Broadway, is built entirely of local stone, and is a typical example of the many old inns of the locality and period.

Symmetrical and severe, the mouldings are reduced to a minimum. The square mullions of the large lower three-sashed windows are repeated in semicircular ones on the second floor. The inn sign and standard are also excellent work.

—[C. M. C. ARMSTRONG.]

JAGO *v.* SWILLERTON AND TOOMER

In the matter of the Arbitration Act, 1889

BY KARSHISH

The case is concluded and the arbitrator has published his award. The author here sets forth the grounds upon which he claims that fact justifies every detail of his fiction.

ix: The Author Justifies Himself

THUS ends the story of the famous cause of *Jago* v. *Swillerton and Toomer*; BUT——, as the film captions say——

This "but" must have been in the minds of many readers: would Grastopen Village Hall, under the circumstances and for the reasons described, in fact, have collapsed? Unless the author can establish that it would so have done, his narrative has no point or justification; moreover, he is bound to redeem the pledge he gave at the outset, when he stated: "*The essential constructional facts of this fiction are from experience and are exactly true in all details.*"

It will be noticed that the author met this challenge in a most handsome way by preparing working drawings of the supposititious village hall, and giving its exact dimensions, and details of its construction, and minute particulars of all relevant circumstances; and he now goes a step further and displays a detailed cross-section of the hall (figure five) amended from the version of Mr. D. W. Toomer, F.S.I., and adds to his obligations that of showing that if Toomer had so constructed his roof, Grastopen Village Hall would *not* have collapsed in spite of the buckling of the floor and the exuberances of Mr. Padrig O'Hara and his friends. The author has allowed himself no loophole of escape. He has to demonstrate that he is *right* in saying that the circumstances leading to collapse might arise exactly as described; that the hall, as constructed by Toomer, *would* have collapsed; that if constructed as shown in figure five it would *not* have collapsed. In undertaking this he makes the modest claim that he is the only person in the world who could do it; and that the massed forces of all the universities and of all professors of natural and applied physics, are in a hopeless position should they attempt to show that in the first case the building would *not* have collapsed, or in the second case that it *would*. The reader is merely asked to accept the author's word that everything in the statement that follows occurred exactly as described, and that each particular given is exactly true. When any doubt exists the margin of that doubt is fully covered by the limits given to it.

IN or about the year 1913 a hall was built in a village adjoining a small country town in the Southern Midlands, to the designs of an architect who was a Fellow of the Institute, by builders

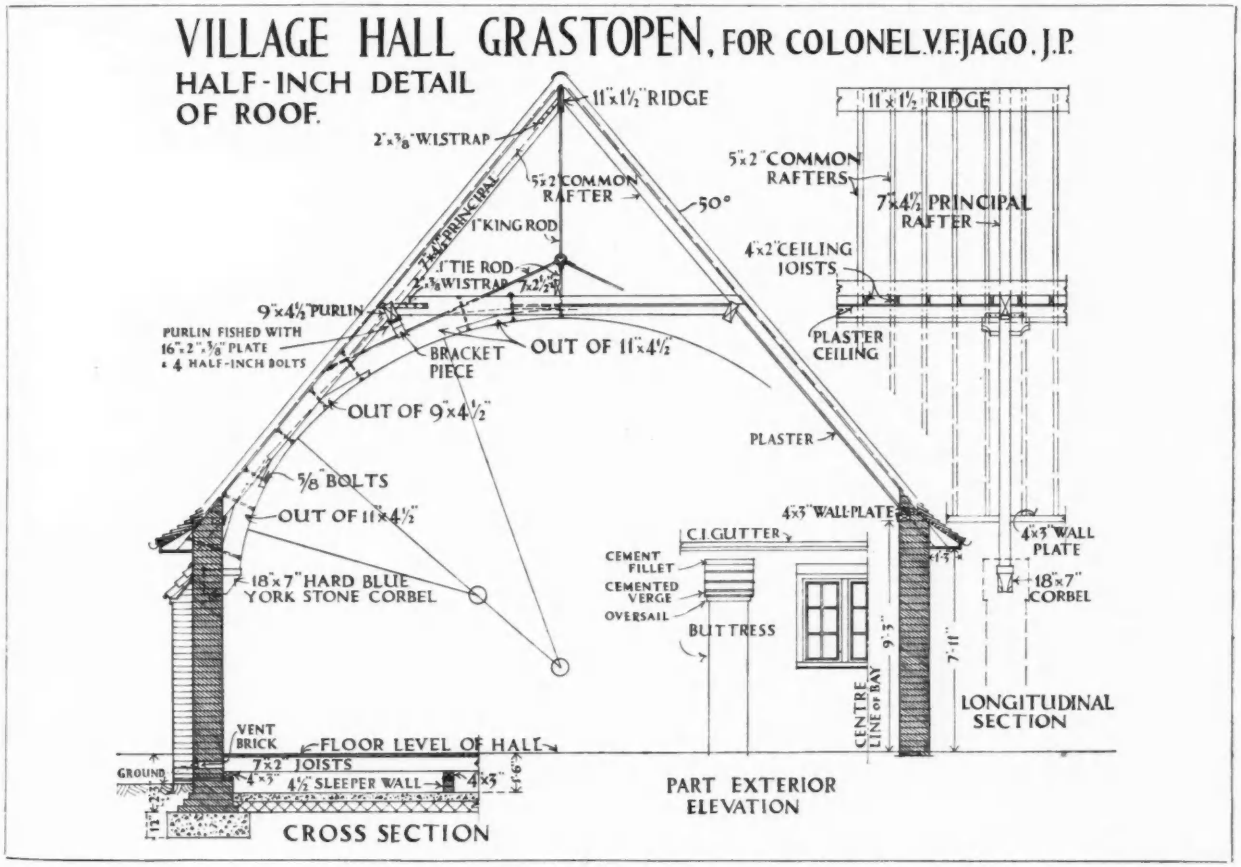


Figure five. How the roof should have been designed so as not to fall down.

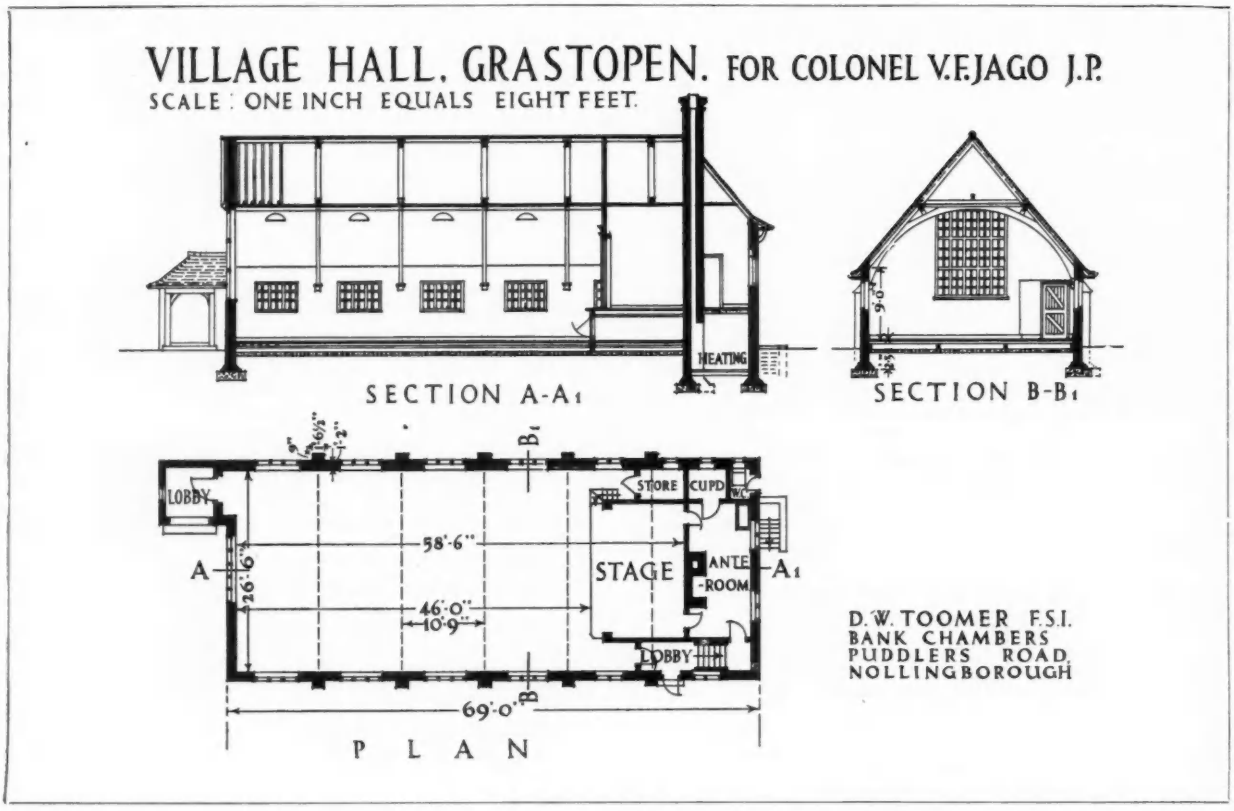


Figure one. Reprint of Mr. Toomer's drawing of his plan and sections.

of high repute, who would find a place in any informed list of the twelve leading London firms. The hall was a gift in memory of a late rector; the building-owner was the rector, and the architect lived only a couple of hundred yards from the site, so that the builders at no time had any serious cause to complain of lack of supervision either by the architect or by the building-owner or by members of a small committee appointed to regulate the discretion of the building-owner, dragoon the architect, and set up the trusteeship in which the after-care of the building would vest. The building stood on an open site flanking the road and at a distance of about 30 ft. from it, and was identical in cross-section with that of Grastopen Hall (figures one and two), except that the roof construction was as shown in figure five. The plan, and therefore the longitudinal section, differed from Grastopen (figure one) only in this, that there was a 9-in. cross wall at the line of the proscenium, and that the retiring-room was in a low, gabled annexe at the side of the stage, instead of behind the stage, so that the hall proper ended at the proscenium, and one of the side walls was further stiffened by the offset of the retiring-room annexe. If Grastopen had been so planned it would still have collapsed—as I have to show; but there seemed some doubt whether, in that case, the collapse would have had the dramatic completeness which gives spice to a tale, and, therefore, Grastopen was given an increased length of unstiffened side walls to make the utter ruin of the whole building a certainty, and its "flat on the ground" collapse not only plausible, but probable. In what follows, then, the reader is asked to assume that the *actual* hall, now spoken of, was identical with Grastopen, except that the roof was constructed as at figure five; for in showing that the actual and stiffer wall would have collapsed under Toomer's roof and would have stood firm under the roof of figure five, I abundantly prove that Grastopen would have collapsed, and still show that if roofed as at figure five it would not have collapsed—that is to say, the two cases differ only in *degree* of ruin; the *fact* of ruin is not involved. The hall now spoken of, then, is to be understood to be identical with Grastopen, but roofed as at figure five.

In designing this hall the idea, or conception, or creative impulse—or whatever that compelling thing is which, for the architect, is a distraction and a joy and at once the bugbear and the salt of life—decreed that the eaves should be kept very low; and, as adequate height of ceiling was a condition, this meant that the collar tie of the principals should be kept unusually high. A reference to the cross-section shows a straddle of the principals which, if not actually excessive, is very nearly so. It need scarcely be said that the rigidity of a roof-truss, braced as this one is, cannot be determined by any niceties of applied mathematics—much less by those at the disposal of the ordinary practitioner: the joints are too many, the stresses too complicated, the material too uncertain and, as in all constructive feats—including even the Forth Bridge—the designer can, in the last resort, only arrive at a decision by concentrating an informed imagination on the problem in such a way that he at last feels identified with the construction and knows as much about what it will, and will not, accomplish as he does of his own legs. So was this roof designed by its architect; but when all was done and drawn, doubts returned and hovered in the air; and as they could readily be dismissed by the expedient of iron ties hidden above the ceiling or behind the braces, ties (as shown in figure five) were introduced. Other particulars in which the roof differed from Toomer's construc-

tion (figure two) are the strapping of collars to rafters, the more thorough bolting of bracings to rafters and collars, the fishing of purlins where they meet at points of bearing—and so forth.

The competitive contract price for the hall was just under £1,000—£1,989 hangs in the air—or, at present prices, about £2,250, and the building, beautifully built, was completed at the end of the summer or in the first days of autumn. At the middle or latter end of autumn the architect one day returned home late from London and, at an hour probably approaching ten o'clock, passed his proud new hall, where, for the first time, a dance was in progress; and he paused, amused to observe, through one of the open windows, an etiquette of the ball-room which was entirely new to him. The usual decorous, suppliant gallantry of the male, common to those occasions in those days, was replaced by a lofty condescension which expressed itself in the gentlemen keeping the left hand in the trouser pocket, grasping the partner with the right arm and gyrating austerely with a remote air, the hat on the side of the head and pipe held firmly in the teeth. The dance having been thus firmly impressed in his memory did not, however, prepare the architect for the congratulations offered him a day or two afterwards by one of those inestimable village worthies who span the abyss of misunderstanding between an aristocratic rector and a democratic village raddled with non-conformity. Said that worthy to that architect: "We all greatly admired the fine spring dancing-floor at the hall the other night."

The architect had no idea what was meant by this, but he had long lost the habit of trying to eradicate the obstinate densities prevalent among his neighbours, and as he went without the praise he deserved he thought he might accept what he did not, and accordingly he acknowledged the compliment with a gracious smile. It was, perhaps, a fortnight later that he dined at the rectory and was told, gently, by the rector, when the two were left alone with the port: "We think we notice cracks in the wall of the new hall."

"*Cracks!* Oh, yes. Cracks. Where are they?"

The architect suspected at once that the principals had spread, and the answer he got was exactly what he expected.

"They are all along between the windows, and across the top of the buttresses."

"Yes? Oh, well, I'll go and have a look at them."

The topic then dropped; because if an owner notices cracks in his brand-new building, and his architect says he will "have a look at them," all is well.

The attention the architect bestowed on those cracks next morning was avid; so also was his attention to the wall, which was startlingly out of the perpendicular; so also to the eaves gutter, which, when sighted along from the gable, was seen to be bulging outward in a strong curve; so particularly to the fact that the face of the brick courses on one side of the horizontal joint through which the crack ran was standing out a full half-inch or more in front of the course on the other side of the crack. The architect's

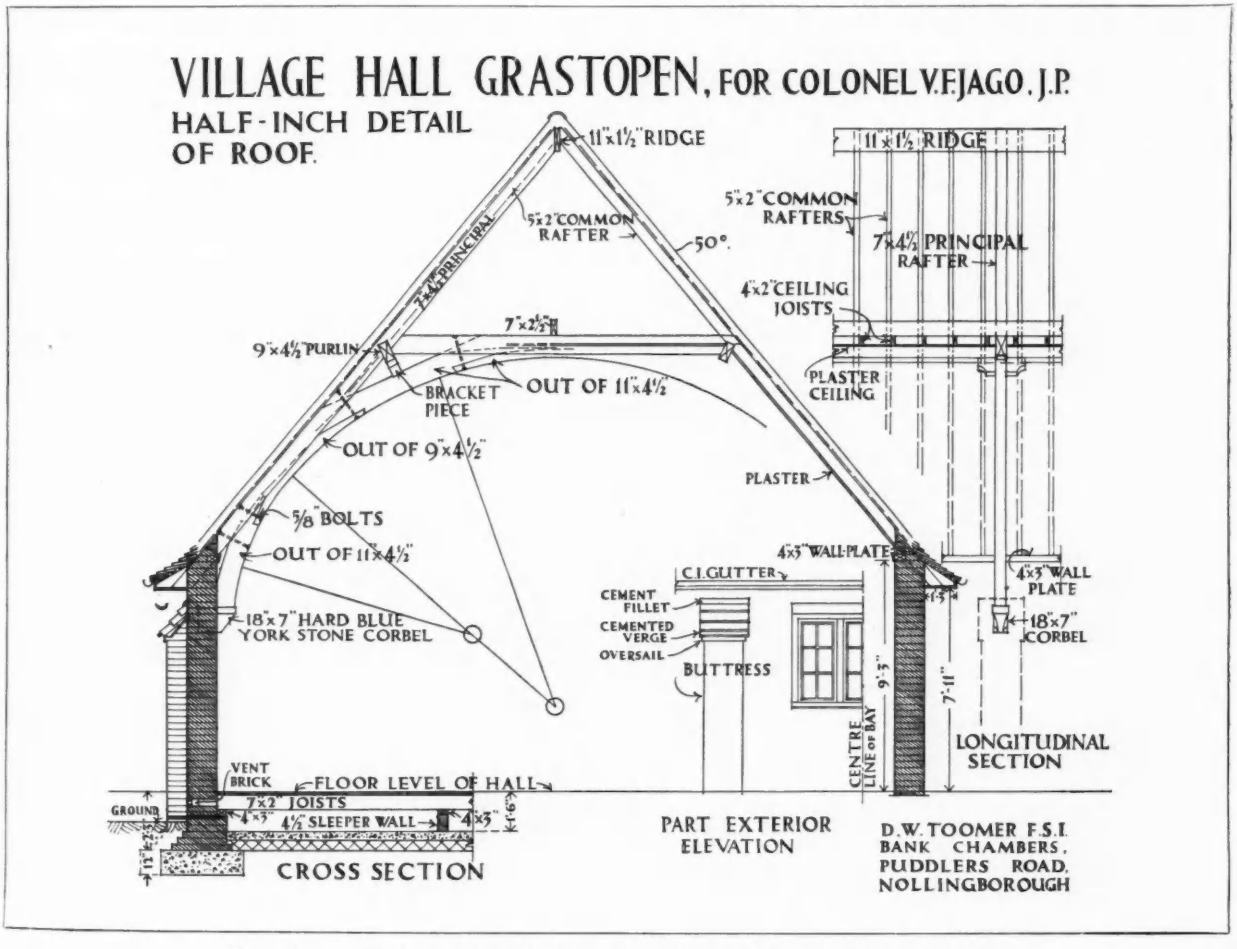


Figure two. Reprint of Mr. Toomer's large-scale drawing of roof in cross-section.

realization that he had fairly been and gone and done it, and that his principals were pushing the wall over, was arrested, but not at all lessened, by his observing that it was not the brick course *above* the crack that was pushed out in front of that below, but the *lower* which was standing out in front of the upper. The thing was not what would be expected; but when a wall cracks it does not particularly stand on the order of its cracking.

The architect did not go inside, as the hall was locked up, but hied him to his office in the neighbouring town and got through on the telephone to the builder's shop-foreman—one J. H. of gorgeous memories (rest his spirit).

"Look here, those principals at the village hall are spreading, and pushing the walls out."

"Lor, sir, they won't move. Nothing will shift *them*."

"All right. Come out and see for yourself."

The appointment was made for ten o'clock next morning, and J. H.—still gruffly rumbling his incredulity—was asked to bring a plumb-bob with him.

The plumb-bob was about four feet long or less, and the greatest overhang of the wall in this four feet was next morning found to be substantially more than one inch. What it exactly was is now forgotten, but the measure included one-eighth of an inch; it was either an inch and one-, or three-, or five-eighths; but it was not seven-eighths, for a two-inch measure was certainly nowhere in the offing. One and five-eighths inches it probably was, but we will assume one and three-eighths inches; so that in the worst case the wall was inclined at least three and a-half inches out of perpendicular.

While the architect was digesting these gritty facts he was interrupted by J. H., who approached him from the direction of the entrance with eyes actually round and staring with astonishment: "Have you been inside, sir?"

When the proud architect advanced to the inner door of his newest creation, he saw the waxed maple floor glistening in heavy undulations. The likeness it bore to a still pool at low tide heaving under the distant ocean's swell, was astonishingly emphasized when J. H. lolted his burly sixteen stone downward on its margin, and a wave—a definite flowing undulation—travelled rapidly to the stage end, returned to his feet, and could be seen again to reach the far wall and lose itself in the glinting reflections of the greasy surface on its second journey back. The explanation was at once clear: the blocks and wedges had been left in place under the skirtings; the floor had swelled owing to the boards taking up moisture from damp autumn airs circulating beneath them; the act of dancing had caused the floor to buckle, and the dancing on the buckled floor had rocked the walls outwards. The unexpected nature of the displacement of the bricks on each side of the cracks was now clear: the principals were not pushing the walls over, they were *holding the walls up*, and the extent of the resistance of the feet of the principals to spreading was the measure of the force necessary actually to slide the 14-in. wall and the 1 ft. 10½-in. pier—which was probably built in cement mortar—upon its bed. The principal had, in fact, sprung out approximately 3 in., but its resistance to spreading would increase as it opened till, at last, that resistance exceeded the considerable force necessary to slide the brickwork on its bed. Startling as this revelation was, it was less a cause of astonishment than was a message the architect received that afternoon.

It was apparent that the first thing was to relieve the pressure on the walls. The architect directed that two of the 4½-in. boards should be cut out down the length of the hall, and 4-in. boards prepared and temporarily laid in the gaps. He would afterwards decide what steps should be taken to force the walls back and restore the building. J. H. carried out these instructions, and afterwards called at the architect's office and reported progress somewhat as follows:—

"I set the men to take up the boards, and went out myself with the 4 in.; but they were too wide! They wouldn't go in where the 4½ in. had come out; they overlapped a quarter of an inch [or some other substantial amount]; and, what's more, sir, the *walls have gone back and the cracks closed up so that you'd never know they had been there, or that anything had ever been wrong with the place.*"

The architect confirmed the accuracy of this report next day: a crawling fly might have noticed a hair crack in the mortar joint where the brick courses had been pushed over; and a particular eye could discern that the window-frames were not absolutely parallel with the angle of the jamb; and the same nice eye could detect a slight bulge in the eaves-gutter when sighted along; but in other respects the building was sound and flawless, as it has stood to this day. It is scarcely necessary to mention that the blocks and wedges were taken out after the floor was released.

The degree of the "springiness," so much appreciated by the village dancers, can scarcely be imagined; but it must have been terrific. Tactful inquiries by the architect discovered that the flags hung out on the roof timbers were jumping and flapping, which proves that the principals were opening and shutting in response to the inward and outward swing of the walls; and if the walls were swinging, the floor was being flattened by the impact of the dancers, and Mr. Ackermann considers that the upward and downward movement of the centre of the floor must in that case have been about 6 in. As Pitfall said, "Was there ever such a dance since this world began!" The horizontal movement of the feet of principal rafters and of the wall at plate level must have amounted to *at least* four inches—for the wall must have rocked inwards as well as outwards—and may well have been five or even more; yet there was no one present with enough intelligence to suspect anything wrong.

Two things only remain to be said: first, would Toomer's roof, in fact, have failed? No doubt on that point is possible; and if the reader considers what a tremendous resistance to spreading the principals were called upon to exert, the absence of the steel ties and of straps binding collars to rafters, and the undue economy of boltings of braces to rafters, and also observes the exaggerated height of the collar, he will not feel any. Toomer's truss was of such workmanship and material that it must have failed.

The second point is the doubt whether the overthrow of the walls was *necessarily* due to the synchronization of the period of vibration of the wall with the rhythm of the dance. I have always had that view in mind as a possible explanation of the outward lolling over of the walls of the hall—of which, as I need scarcely say, I was myself the architect—and of their return to perpendicular on their release; and after threshing the matter out with my friend, Mr. Ackermann, who found the problem curiously interesting and not by any means easy to solve, he satisfied himself, and satisfied me, that, for the reasons given in Randegger's evidence, no other explanation is possible.

When I dragged out my old drawings, for the purpose of illustrating this narrative, I found, on my half-inch pencil detail, of which figure five is an exact tracing, a reminder that, when I was at work, it was in my head that I had kept the collar up just as high as was safe. The figure which I sometimes sketch on a half-inch detail to fortify my sense of scale is there shown. It is a joyous, grinning, festive, capering figure—but it is the figure of a *skeleton*. Death and destruction were evidently humorously in mind at that moment, and I am sorry I did not complete the tracing (here reproduced) with a thing born of the same awareness which preserved me from the fate of Mr. Toomer—or probably a far worse one, for I should never have had his wonderful luck. THE END



East elevation of design placed second. By D. H. McMorran and Arthur Bailey, Harrow-on-the-Hill.

SWANSEA CIVIC CENTRE COMPETITION

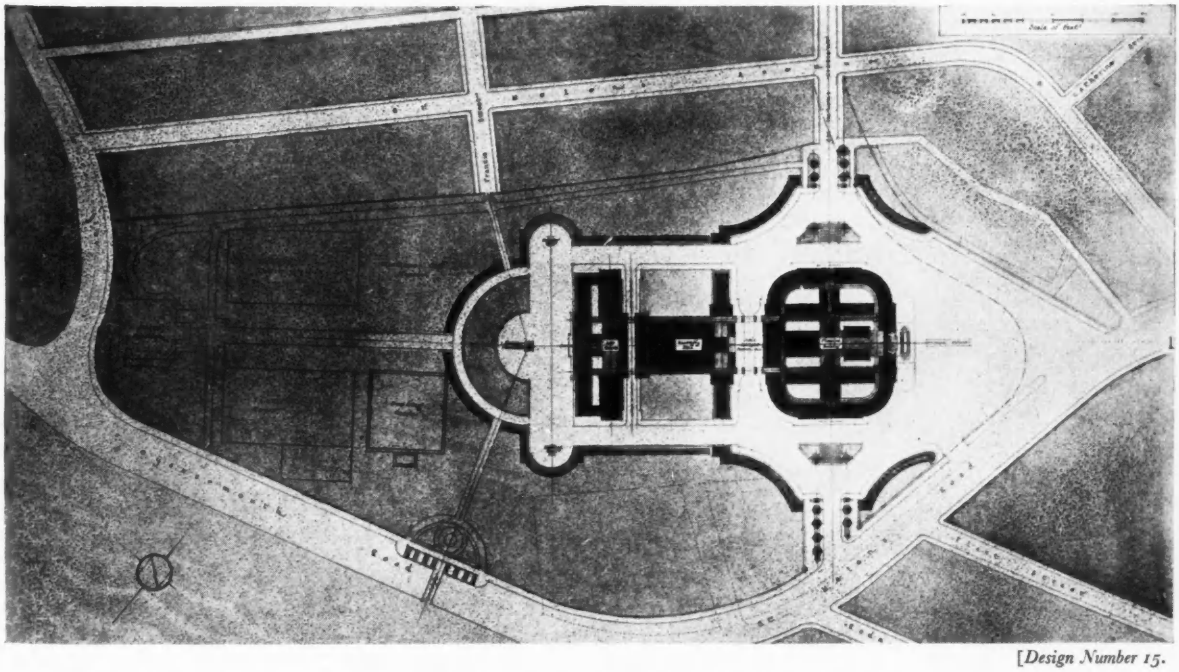
BY "OLD COMPETITOR"

WHEN a critic is confronted with an exhibition of competition designs, one of his difficulties is to determine how to cope with such a mass of material. For the Swansea Civic Centre over seventy schemes were submitted. There is scarcely one of them that does not raise some interesting point of design which one might dwell upon and derive some benefit from its examination. Manifestly, an exhaustive analysis of every scheme is not possible, so the question arises how one may limit the discussion.

In the first place, it may be well to separate the critics into two main sections—those who took part in the competition themselves and those who did not. Members of the former class have a peculiar and intensive interest in the designs submitted and in the method of their presentation. On the other hand, a series of designs for a large group of buildings has a purely architectural interest, apart from the competitive element.

An examination of the designs reveals the fact that the assessor's choice must have been a very easy one, for Messrs. Ivor Jones and Percy Thomas's scheme was not only the best but pre-eminently the best. They alone of the competitors succeeded in arranging the four blocks in that ideal manner which needs only to be seen in order to be accepted as inevitable. Obviously, when a group of buildings comprises four principal sections between which a complete system of circulation is demanded, a quadrangular arrangement is the best, provided that the site admits of such a treatment.

Mr. Ashley, in his choice of designs to be placed second, third and fourth, must obviously have attached great importance to draughtsmanship and general finish of presentation. There appears to be no recognized convention to decide the policy of assessors in this matter. Should the second prize be given to the scheme most closely resembling the winner's, or to one which, while differing from it, is almost as practical and economical? Or is the second prize to be in the nature of a compensation to a competitor who, though he has, perhaps, not observed the limits of cost specified in the conditions, nor even produced a plan of outstanding merit, has,

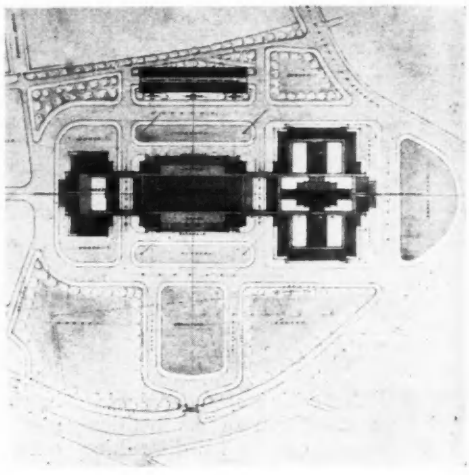


[*Design Number 15.*

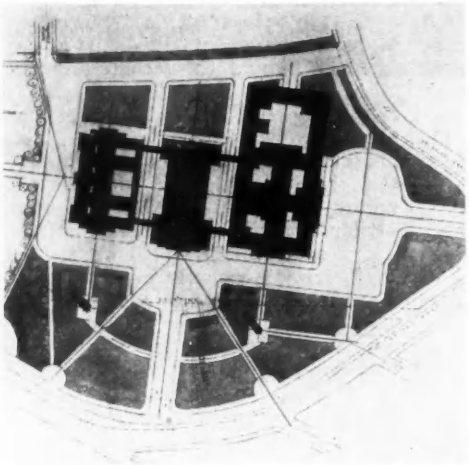
Block plan of design placed second. By D. H. McMorran and Arthur Bailey, Harrow-on-the-Hill. The site is bounded on the north by St. Helens Avenue, on the south by Oystermouth Road, and on the east by St. Helens Road and St. Helens Crescent.

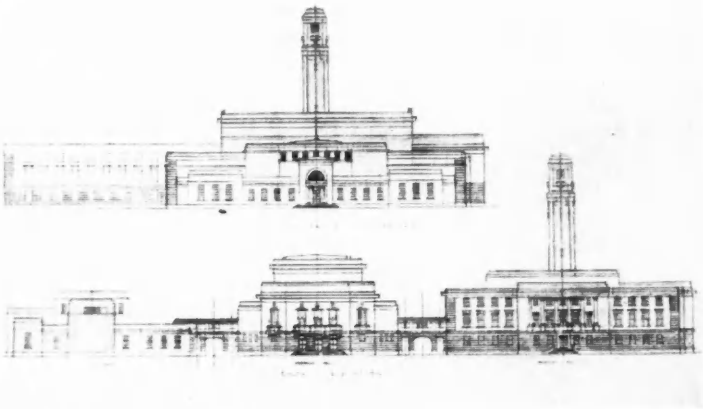
Swansea Civic Centre Competition



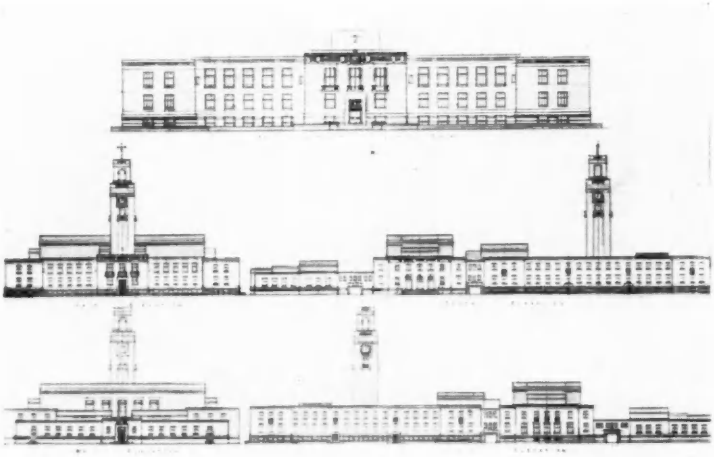


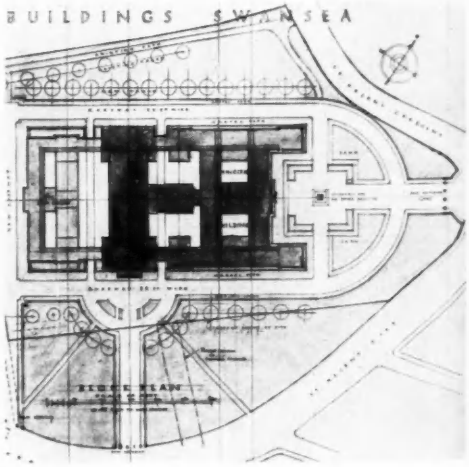
Design Number 20 — *W. Naseby Adams, London.*





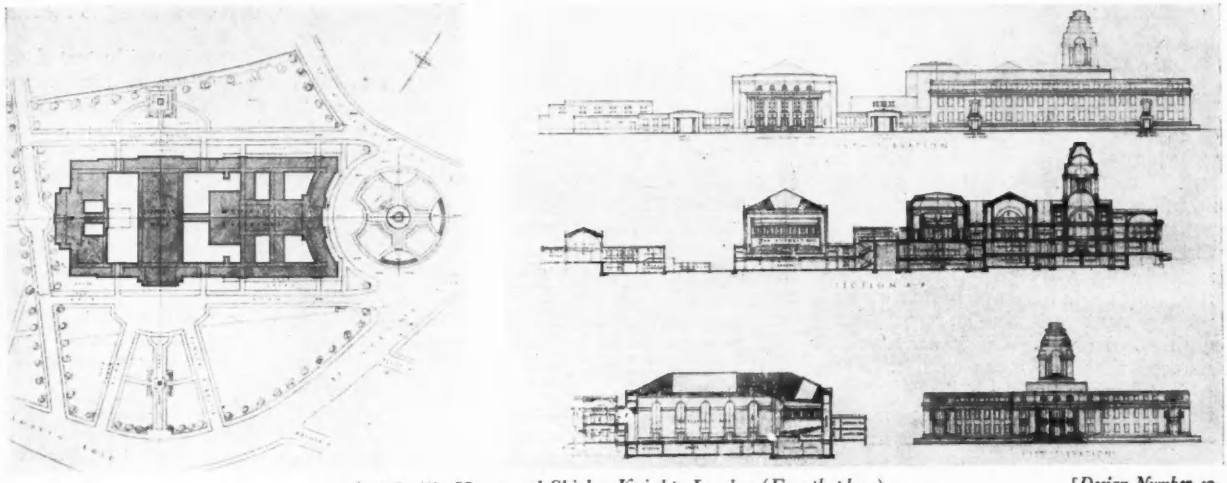
Design Number 16 — *Martin Kaye and Edward C. Thewlis, Southend-on-Sea.*



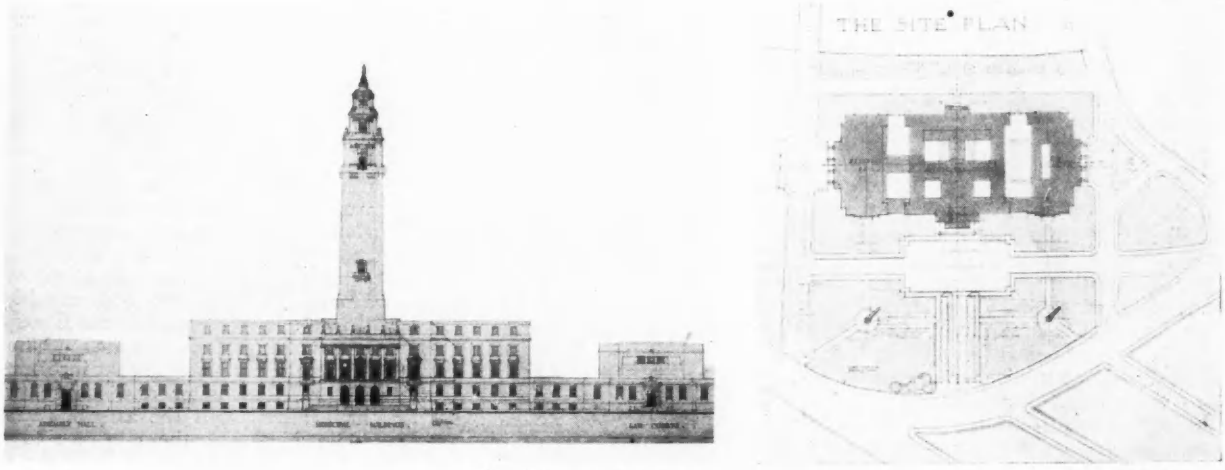


Design Number 9 — *V. O. Rees, London (Third place).*

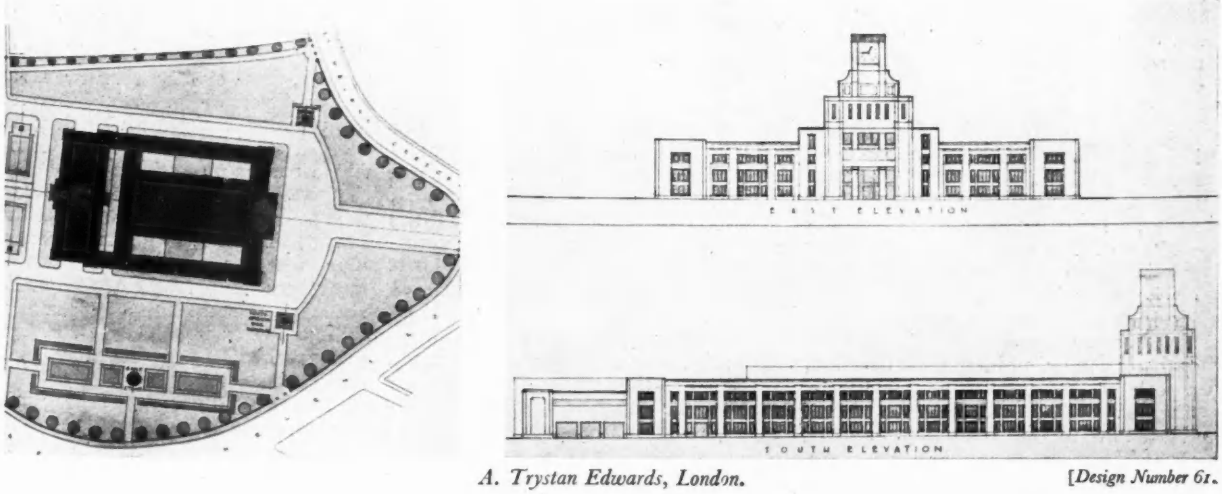
The Designs of:—



C. Wyville Home and Shirley Knight, London (Fourth place). [*Design Number 40.*



Lanchester and Lodge, London [*Design Number 21.*



A. Trystan Edwards, London. [*Design Number 61.*

nevertheless, submitted a set of drawings so beautifully rendered, and finished in such detail, that he deserves to be rewarded for this alone ?

It is certainly true that the designs placed second, third and fourth in the Swansea Competition showed that their authors had " gone all out to win," and had paid the assessor the compliment of supposing that nothing but their very best was worthy of his attention. In contrast to these schemes I might mention others equal to them and perhaps, in some respects, superior in the qualities of design, but which, nevertheless, were so poorly finished that they show traces of haste and bad management on the part of their authors. In particular it may be remarked that not more than a dozen even tolerable half-inch details are to be found among the seventy or more designs exhibited at Swansea.

Let me describe a not uncommon case where a competition scheme fails through lack of organization. After an immense effort the plans are inked in. Then it is found, of course, that although they appeared to be completed to all intents and purposes, they were really very far from being in that agreeable condition. A thousand unforeseen little odds and ends have to be added. The printing and dimensioning of the rooms takes two men three days to accomplish, and then the master of ceremonies surveys his staff and says : " There are forty-eight hours left. Let us tackle the elevations and half-inch detail." He has thought these all out, of course ; but not quite. And now it is time for the last great push.

Half a dozen minions come, prepared to work all night. Lest their spirits should droop during the effort, a raucous gramophone is put on to play the latest rag-time tunes. The architect, on the verge of a nervous breakdown, flits from board to board, settling innumerable little points of detail at the last moment, while his assistants are only praying that he would have the sense to keep out of the way and let them get on with the work without these interruptions.

And then there is the report. He had forgotten all about the report ! With feverish haste he pens the sentences, and in as impersonal a style as he can muster he sings the praises of his own scheme and by implication condemns every possible alternative which might be submitted by his rivals. A few winged words about acoustics are added, together with an almost unintelligible diagram, especially designed to obfuscate the assessor.

And now for the rendering. During the chief's absence, this has been started in a manner which is the direct opposite to that which he had expected or desired. Sponges have to be brought out at four o'clock in the morning. Frayed nerves are the result, and several of the draughtsmen do not know whether to lose their tempers openly or to burst into tears. Nevertheless, the thing is done. Nearly all the " mosaicing " has been washed out in the process, but it cannot be helped.

" For heaven's sake shut off the gramophone for one moment," says the chief ; " I can't hear myself speak."

So, without musical aids, the work proceeds until, to everybody's relief, it is time for breakfast. It is discovered, however, that the few hours available between the conclusion of this meal and the time at which the drawings are due to be dispatched by train to their destination are inadequate.

A motor car has to be hired, and the services of an assistant to secure the safe delivery of the precious package.

The competitor, after weeks of wild excitement and extravagance, has not even the satisfaction of imagining that his design can be in the running at all. For architecture is not only an art, it is a business; and assessors are quick to seize upon those designs which show evidence of an all-round competence. A designer who has allowed himself time to supplement his plans, sections and elevations by a very carefully worked out half-inch detail, is sure of the assessor's regard.

While, however, this much is due to the assessor, and indeed architects might almost be advised not to compete at all unless they are prepared to submit schemes exemplifying such a standard of accomplishment, the competitors, on their side, may claim of the assessor certain prerogatives. Again and again we must plead that an architectural competition cannot be conducted with fairness unless the assessor insists upon *absolute uniformity in presentation*. There should be no place in competitions for the " swagger " draughtsman exhibiting engaging idiosyncrasies of his own.

It was entirely to the good that for the Swansea Civic Group various parts of the plan were to be coloured in certain specified tints to distinguish them from one another, and the competitors had also reason to be grateful for the injunction that the elevations were to be uncoloured. Although one competitor, whose design is here illustrated, was disqualified for disregarding it, the rule is an excellent one, and its enforcement cannot but promote the best interests of the competition system in general. Further instructions, however, are needed for the representation of sections and block-plans. Should the solids in the sections be consistently all black or all white, and should footings be shown ? In the block plans, should the buildings be in dark tone, and should rooms or corridors be indicated ? For one particular prohibition the competitors have reason to thank Mr. Ashley with all their hearts, and that is his ban upon the ridiculous line borders around the sheets of drawings, which used to be so fashionable.

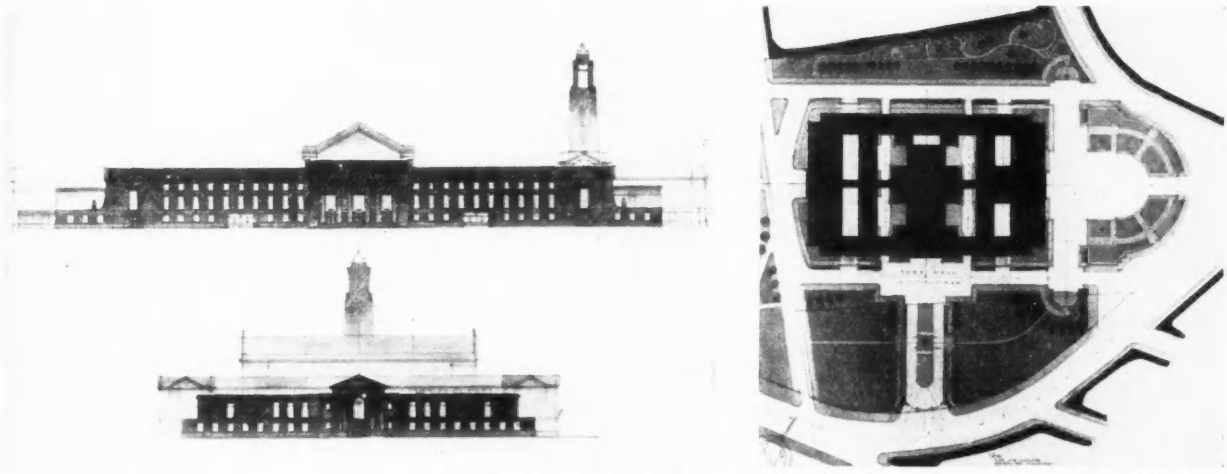
The ten schemes here illustrated are chosen as representing three main types of solution to the problem which was set to the competitors. The first five show the three main divisions—Municipal Offices, with Council Chamber; Assembly Hall; and Law Courts—arranged in a row and lightly joined together either by bridges or low wings. The question arises as to how far the architects in these schemes have contrived to give to the various blocks a sufficient degree of homogeneity to enable them to appear as parts of a single artistic whole. It will be observed that Messrs. D. H. McMorran and Arthur Bailey have sought to achieve this homogeneity by the time-honoured device of employing the same Order around the group, and this certainly helps to tie the blocks together, although the complete symmetricality of the municipal block renders it somewhat too independent of the remainder. Naseby Adams and Messrs. Martin-Kaye and Edward Thewlis have both produced distinguished designs, in the Classic manner, in which the various blocks, in spite of the differences in shape, expressive of their various functions, have similar stylistic elements, and are thus made to appear members of one family. The schemes submitted by V. O. Rees and by Messrs. Home and Knight are both exquisitely drawn and rendered, but the silhouette of the buildings towards the south front, facing the sea, is somewhat incoherent. Messrs. Lanchester and Lodge, who have disregarded the assessor's rather plain hint that the entrance to the municipal offices should be to the east of the site, have produced a fine elevation, which is perhaps the only one in which a tower of narrow width has been properly related to the façades on either side of it.

The next two schemes here illustrated, namely, those by Trystan Edwards and Messrs. Lyon and North, differ from the remainder inasmuch as they have merged the several sections into a single compact group.

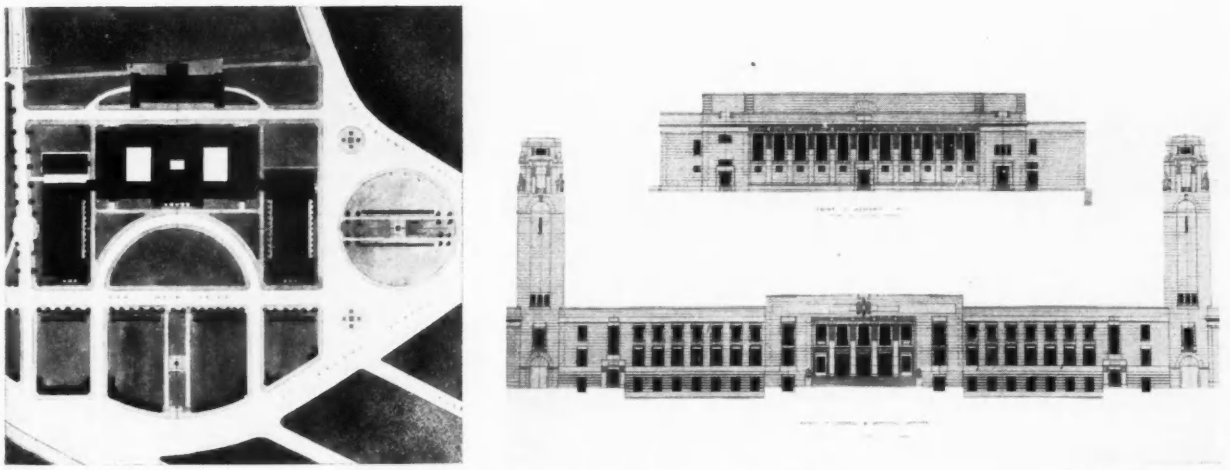
Messrs. Crouch, Butler and Savage's scheme has an impressive symmetrical layout, though it is perhaps questionable whether the twin towers are altogether happy. J. A. Ogg Allen, realizing the difficulty of making a slender tower preside over so large a group, has made it a detached campanile.

I hope that other enterprising municipalities will soon follow the example of Swansea and serve the cause of architecture, in competitions, in a similar manner.

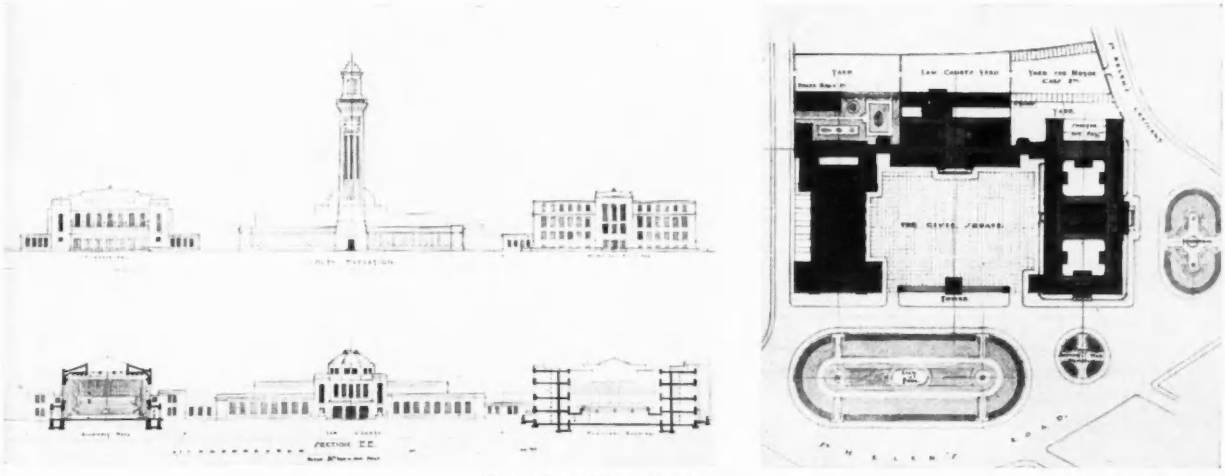
Swansea Civic Centre Competition — *The Designs of:—*



Lyon and North, Barking. [*Design Number 45.*



Crouch, Butler and Savage, Birmingham. (*Commended.*) [*Design Number 33.*



J. A. Ogg Allen, Aberdeen. [*Design Number 17.*

LITERATURE

SPECIFICATION, 1930

THE 1930 edition of *Specification* well maintains the tradition which has earned for this publication in the past its high reputation as a work of reference for architects, surveyors, civil engineers, and all interested in building. It would be difficult to find in more compendious and convenient form such a mass of information on building materials and processes as is contained in this volume. Notwithstanding the wide field which has had to be covered and the number of subjects treated, the book is a perfectly simple one to handle, owing to its orderly method of arrangement and the care with which the contents have been indexed.

The utility of a book of reference depends to a large extent upon the ease with which it can be handled, a test which *Specification* easily passes.

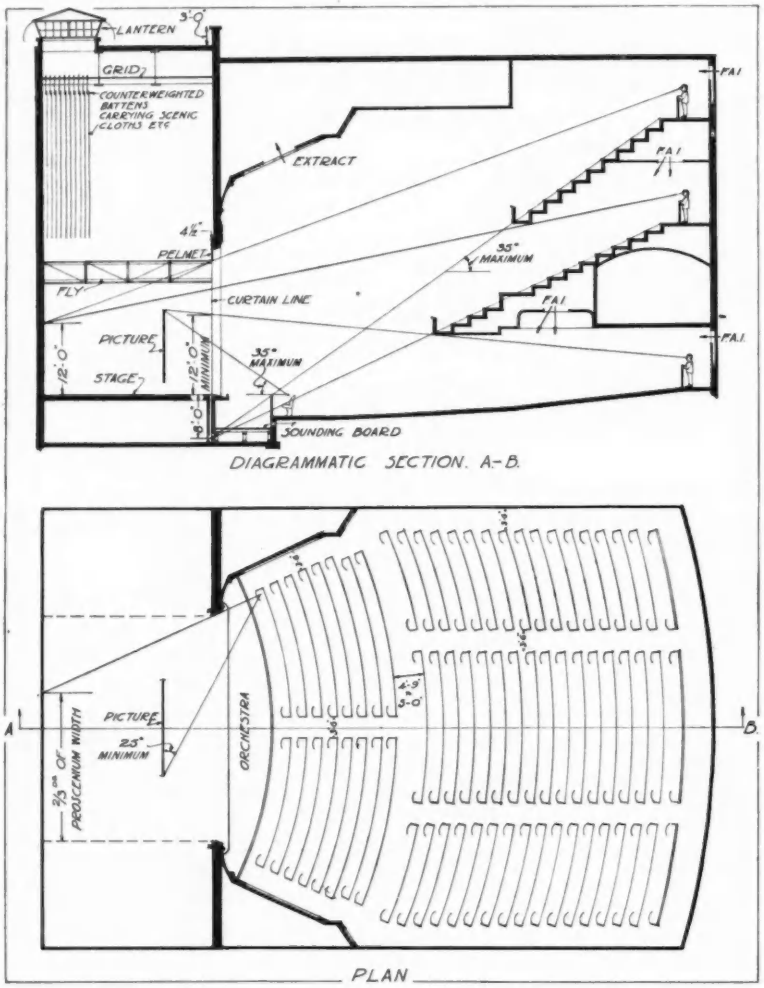
The building industry, however, never stands still; and improvements in methods of construction and fresh sources of supply of materials (particularly proprietary articles) are continually being brought into use. This element of progress in the industry has not been lost sight of by Mr. Frederick Chatterton, F.R.I.B.A., the editor, nor by the publishers. If such a publication is to maintain its status as a standard work, it must continually be kept up to date.

Since the last edition was published, considerable alterations have been made in the trade sections, which comprise the greater part of the work. Much new technical information has been added, principally in the direction which we have indicated of keeping the volume abreast of modern practice. This has led the compilers systematically to condense and compress the other matter in revision, and they justly claim that great gain to the work has thus resulted. The essential features remain, particularly the Standard Specification clauses, and the new matter is of the kind that is especially valuable to all anxious to keep in touch with modern developments. In illustration of this policy I would mention articles dealing with such subjects as ultra-violet-ray glass, and with artificial daylight. Again, in the "Roads and Footways" section there is reproduced (by permission of the British Engineering Standards Association) the latest specification for single-coat asphalt surfacings, recently prepared by the Institution of Municipal and County Engineers and the County Surveyors' Society.

Welcome additions are made to the important series of illustrated special articles which have proved so valuable in former issues. The subjects for the present series have been chosen on the principle which has been followed for many years past, viz., to select topics of present-day interest and importance upon which concise information is not readily obtainable elsewhere. There are five such articles in the 1930 edition, treating of matters so widely different as the planning of theatres, oil as a heating fuel, motor garages, tall chimneys, and acoustics. It is impossible in the limited space at my disposal to do more than make general reference to this section of the work. It may be said, however, that three of these articles are signed by writers who are acknowledged experts on the subjects treated; and, further, that the two anonymous articles are obviously the work of men equally qualified, both by knowledge and experience, to give advice in their own particular line.

O. J. HEALING

Specification, 1930. Edited by Frederick Chatterton, F.R.I.B.A. The Architectural Press. Price 10s. 6d. net.



From Specification 1930.] [*Edited by Frederick Chatterton.*

Diagrammatic plan and section of a hypothetical building, illustrating the principles which govern the setting out of the seating sight lines, stage and screen in theatres and cinemas.

THE NATIONAL PHYSICAL LABORATORY'S REPORT

IT is not often that an official report contains so much of both scientific and industrial interest as does the report of the Executive Committee of the National Physical Laboratory for the year 1928, recently issued.

When it is recalled how wide is the range of work covered by the institution, it is not surprising to find the Executive Committee's brief summary, together with the more detailed reports of the departments, extending to 270 pages. Research work in physics, electricity, metrology, engineering, metallurgy and other branches of science naturally bulks largely in the activities of the institution, but the increase in paid work done for British manufacturers indicates that the

industrial applications of science are being better appreciated now than in the past. Even a brief catalogue of the activities of the Laboratory would occupy considerable space, but mention should be made of various matters of special interest to the architect.

The new building to accommodate the Physics Department will enable the work of the Heat Division to be carried on under much improved conditions, though unfortunately the Sound Division is still hampered by lack of adequate facilities for research work. The acoustics of buildings, the measurement and analysis of sound, sound production, reproduction, transmission and magnification, and the study of noise are all becoming of increased importance. In this Division the study of sound transmission by partitions has been continued, and a number of simple and composite partitions have been examined, including plywood, various wall-boards, match-boarding and a brick wall. We look forward with anticipation to the published account of this work, which is promised. The methods developed for examination of the acoustics of buildings have been applied to a hall in the new building of Imperial Chemical Industries, Ltd., to a proposed new lecture theatre at Edinburgh University, and to the Royal Albert Hall. For the last a new three-dimensional method has been devised in which light waves replace for experimental purposes the waves of sound.

In the Heat Division, in addition to the usual determinations of the conductivity of heat-insulating materials, made for firms, an investigation into heat-flow through insulating walls as affected by certain modifications of shape has been conducted, and the results already published.

In connection with lighting, the Photometry Division organized a series of tests for estimating glare and visibility in lighted streets. These tests, made in connection with the Sheffield meeting of the Association of Public Lighting Engineers, yield interesting information, and a full report on the work has been submitted to the Illumination Research Committee. An investigation, referred to in the previous year's report, on "Reflection from Road Surfaces" has been completed and a report sent to the Illumination Research Committee. A résumé of this work was read at the meeting of the International Commission on Illumination in September, 1928. Good progress has been made in the investigation into various problems of room-lighting, including the study of illumination from light wells, measurement of daylight factor in deep rooms, transmission of window glasses when clean and after exposure, and various other associated work.

In the Engineering Department, a large proportion of the research work was done to programmes controlled by various boards and committees of the Research Department or by outside bodies, and this work included, amongst many others, research for the Building Research Board, for whom the investigation into the wind pressure on structures was continued. These experiments, it will be remembered, are in continuation of the investigation initiated by Doctor, now Sir, Thomas Stanton. Experiments have also been made on a number of floor slabs of reinforced concrete, designed and made at the Building Research Station.

These represent merely a few activities of the Laboratory, for there are many more of both scientific and practical industrial interest. Touching the electrical side, it may be mentioned that the erection of the million-volt transformers in the high-tension building was completed in June, 1928. The installation has successfully passed the contract tests, which included a run of one hour at 10 per cent. overload. A fine photograph (see frontispiece of this issue) shows the spark obtained from the plant at about a million volts.

Despite the fact that the report represents merely a brief statement of work done during the year, it is impressive as an indication of the part which scientific research plays in industrial life to-day. A. H. H.

The National Physical Laboratory Report for the Year 1928. His Majesty's Stationery Office. Price 9s. net.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

AN interesting debate, initiated by the Bishop of Southwark, took place in the House of Lords on the question of slum clearance. The Bishop asked the Government when it was proposed to introduce legislation on the subject. He pointed out that, in spite of the magnificent effort at housing which had been made in this country, there was reason to believe that the slums were almost as overcrowded as they were ten years ago. A simpler method of carrying through slum clearance schemes was needed, and also some different method of compensation. The present method penalized the good as well as the bad landlord. A larger amount of help was required from the Government in slum clearance schemes, and legislation should be passed penalizing the tenant who deliberately damaged the house in which he lived.

The Bishop of London urged the Government to take the matter up with determination.

Lord Daryngton said there was no reason why we should have 50,000 men idle in the building trade. Was there, he asked, no way in which the 1,500,000 unemployed could be utilized to build houses?

Lord Onslow said a great deal of the difficulty and delay in the solution of the problem was due to the unfair basis of compensation to the owners of property. The opportunities which the reconditioning of houses presented were considerable, and new powers should be given to local authorities in that direction.

Lord Jessel, in putting the view of the London County Council, said that as late as last June the L.C.C. decided to expedite their existing programme of slum clearance and embark on a further programme involving the rehousing of 30,000 people, at an estimated cost of £4,500,000. Pending the removal of certain legal difficulties, several schemes had been held up under the new programme, and, he hoped, therefore, that the debate would accelerate the introduction of the Government's Bill. He hoped also that the Government would consider dealing with section 46 of the Act of 1925, because that was a matter which kept a great many local authorities from making plans for the reconstruction of slum areas. If an area was condemned, they could only get the site value, and no compensation was given for the building. It had always seemed to him a great injustice that an owner who had looked after his property, though the surrounding area might be bad, should get nothing at all for that property. Reconditioning could be done much more cheaply than the building of new houses, and if the public utility companies could be assisted to a greater degree in getting cheaper money they would do the work much better than any local authority. They might also get the building societies interested in the matter.

Lord Marley, for the Government, admitted that the result of many years' work had been disappointing. The total number of houses under the confirmed schemes was only 15,000, and the persons rehoused just over 74,000. The Government, in their Bill, had decided to simplify and shorten the procedure for dealing with slum-clearance schemes. They would make provision for the necessary capital to deal with the cost of such clearances, and they would assist local authorities in the inspection of property, and its maintenance in proper repair. They were definitely prepared to encourage the decentralization of industry, and the removal of factories from closely populated areas into more rural areas where

town planning would ensure that they did not interfere with the amenities of the district. There were difficulties in an overcrowded legislative programme, but it was the full intention of the Government to introduce their Bill into the House of Commons very shortly.

The debate was then adjourned.

In the House of Commons, Mr. Greenwood informed Mr. Gould that the number of houses authorized under the 1923 Act which had not been completed by September 30, 1929, was approximately 46,500.

Miss Rathbone asked the Minister of Health whether he would so expedite the making up of accounts relevant to the cost of slum-clearance schemes under the Housing Act, 1923, that the House might have, at least, approximate figures showing the average expenditure per dwelling incurred out of public funds in, at least, some of the schemes carried out under existing legislation before it was asked to embark on a new policy of slum clearance under the promised new Bill.

At question time Mr. Greenwood informed Dr. Hastings that the total sum paid to February 15, 1930, on account of Exchequer subsidy in respect of houses built since the Armistice had been £82,832,993. The Exchequer subsidy in respect of houses already built was payable for varying periods of from twenty to sixty years under the relative provisions of the Housing Acts, 1919 to 1926. The present annual Exchequer liability was about £11,000,000 and, apart from increased provision necessary in respect of further houses, would be first reduced about the year 1940.

Mr. Robert Richardson asked the Minister of Health if he would furnish a return showing annually, from 1919 to 1929, the number of local authorities in England and Wales who erected houses by direct labour, and the number erected.

Mr. Greenwood said that particulars as to direct labour schemes in the form desired were not available, but the following statement showed the number of State-assisted houses included in direct labour schemes of local authorities in England and Wales which had been approved since January 1, 1919 :

Under the Housing, Town Planning, etc., Act, 1919 :	
1919 to 1927	8,160
Under the Housing, etc., Act, 1923, and the Housing (Financial Provisions) Act, 1924 :	
8 months ended March 31, 1924 ..	1,522
Year ended March 31, 1925	3,344
" " " 1926	4,667
" " " 1927	5,921
" " " 1928	5,948
" " " 1929	4,481
9 months ended December 31, 1929	4,558
Total under Acts of 1923 and 1924 ..	30,441

All the houses approved under the Act of 1919 had been completed. The number of local authorities concerned was approximately 120. 25,903 houses approved under the Acts of 1923 and 1924 had been completed by December 31, 1929. The number of local authorities concerned is 110.

Mr. McKinlay asked the Minister of Health whether he could state the number of working-class dwellings in England and Wales which had been acquired for demolition under clearance schemes between April 1, 1925, and December 31, 1929, and the number of new dwellings erected in connection with such schemes.

Mr Greenwood said that information as to the number of working-class dwellings acquired was not available. The number of buildings which would include some buildings other than houses acquired by local authorities in England and Wales between April 1, 1925, and December 31, 1929, in connection with approved slum-clearance schemes was approximately 10,000, and the number demolished approximately 8,000. The number of new dwellings erected during the same period in connection with such schemes was nearly 9,000.

Mr. Greenwood informed Mr. F. Owen that, up to December 31 last, the latest date for which figures were available, assistance had been promised under the Housing (Rural Workers) Act in respect of 2,510 dwellings in England and Wales. Work had been finished on 1,669 of these, and was in progress on a further 650. Applications in respect of an additional 396 dwellings were then before the local authorities.

Sir William Davison asked the First Commissioner of Works whether steps would be taken to remove, or at any rate to reduce in height to the level of the boundary wall, the galvanized-iron building used for Office of Works stores immediately to the west of Sir Christopher Wren's orangery in Kensington Gardens, on the north side of Kensington Palace.

Mr. Lansbury said that the building in question was at present in use, but it was hoped that it could be vacated and pulled down by the end of the present year.

SOCIETIES AND INSTITUTIONS

R.I.B.A. ANNUAL CONFERENCE

The R.I.B.A. annual conference will be held in Norwich from June 18 to 21, 1930, inclusive.

THE HONAN SCHOLARSHIP

Mr. R. P. S. Hubbard, of Bedford, has been awarded the Honan Scholarship for 1930. The scholarship is a travelling one of £50. The second prize of £10 has been divided between Messrs. F. H. Littler, of Preston, and A. G. S. Sidler, of North Wales. The three prizewinners are third-year students at the School of Architecture, University of Liverpool.

SOCIAL LIFE IN FRANCE

Professor A. E. Richardson, F.R.I.B.A., lecturing on "Social Life in France during the Years 1700–1830," at Leeds, said that in art as in life there was continual change. Architecture, which embodied all the arts, demanded to be studied as an integral part of the social fabric of a nation.

By the year 1700, he said, the thawing influence of the Italian Renaissance had been at work for two centuries. The Catholic Church had not lost authority. On the land men were held in thrall; they worked, delved, spun, carved and shaped, much as their ancestors had done. All work was accomplished by hand; the machine, as we know it, had not yet emerged as an instrument of intricate parts. For these reasons the art of the eighteenth century, despite its pseudo-classicality, was related to the volume of endeavour which gave the world the glorious cathedrals of the thirteenth and fourteenth centuries. The intuition for fitness, which previously had accompanied Gothic art, was in process of transference to a revived classicism. The beginning of the period marked the end of the compromise between the mediæval and the rise of the modern. The end of the period showed the limits to which the purer expressions of revived classicism could be taken.

The aftermath of the strictly classical experiments, the lecturer said, came in the first quarter of the nineteenth century, when the well-known themes of the Italian Renaissance were exploited in all directions. From thence onwards French architecture, aided by the doctrines of the "Ecole des Beaux-Arts," provided a formula for design. All nations paid tribute to Paris. Viewed in retrospect, it could be said that the value of French art in the eighteenth century was that it extended the best manifestations of the later Italian Renaissance at a period when any other form of expression would have been opposed to contemporary thought.

ART AND CIVILIZATION

An appeal on behalf of distressed artists was made by Sir William Llewellyn, P.R.A., when presiding at the annual general meeting of the Artists' General Benevolent Institution held at Burlington House last week.

Sir William said that art was necessary

to civilized life. It was always with us, and we could not get away from it. Without it there could be no civilization. Everyone who had to do with their profession knew that an artist could not work in distress of mind, and if that distress were not relieved his work must suffer.

The balance-sheets of the institution and the orphan fund, which were presented by Mr. E. Guy Dawber, F.R.I.B.A., hon. treasurer of the institution and the orphan fund, showed that the total of the annual subscriptions and donations last year amounted to £6,589, and the total of reliefs and annuities was £10,062. The interest on investments totalled £5,550.

The president, directors, and hon. officers of the institution, and the committee of the Artists' Orphan Fund, were re-elected, and the following were added to the directors: Messrs. W. G. de Glehn, Harold Knight, and Sydney Tatchell, F.R.I.B.A.

ARCHITECTURE AND SCULPTURE

The second of a series of lectures on the art of building was given at Manchester University recently. Mr. Stanley Casson, who spoke on "Modern Sculpture and its Architectural Background," illustrated by means of lantern slides the uses to which sculpture had been put in the interiors and on the exteriors of modern buildings, and in gardens and public places. He said that to establish a connection between sculpture and architecture seemed to be essential, and he explained how this had been done in Europe and America.

Interiors of buildings, he pointed out, had opportunities for sculpture which were limited but quite definite, as in the case of the Chanu building, a skyscraper whose central heating apparatus, in some instances, was set in panels of decorative bronze and allegorical figures. Private houses had opportunities in alcoves and niches.

ANNUAL MEETING OF THE SOUTH WALES INSTITUTE OF ARCHITECTS

At the eleventh annual general meeting of the Western branch of the South Wales Institute of Architects, held at the Hotel Metropole, Swansea, the following officers were elected: Chairman, Mr. Oliver S. Portsmouth, A.R.I.B.A.; treasurer, Mr. G. R. H. Rogers, L.R.I.B.A.; honorary auditor, Mr. E. E. Morgan, A.R.I.B.A.; and Mr. J. Herbert Jones, honorary secretary.

The following members were elected to serve on the Branch Committee: Fellows: Messrs. Charles S. Thomas, F.R.I.B.A.; Edwin Smith, A.R.I.B.A. (Neath); Edward R. Brown, L.R.I.B.A.; J. T. Jones (Neath); and H. A. Ellis, F.R.I.B.A.

Associates: Messrs. C. W. Geddes and L. W. Devonald.

The officers elected to represent the West Wales area on the General Council of the South Wales Institute of Architects were:

Fellows: Messrs. J. Herbert Jones, F.R.I.B.A.; O. S. Portsmouth, A.R.I.B.A.; Charles S. Thomas, F.R.I.B.A.; G. R. H. Rogers, L.R.I.B.A.; H. A. Ellis, F.R.I.B.A. and Edwin Smith, A.R.I.B.A. (Neath).

Associates: Messrs. C. W. Geddes and L. W. Devonald.

Mr. J. Herbert Jones, the retiring chairman, presented the prizes awarded to successful students in the annual studentship competitions as follows: D. Eric Stephens, first prize for the best essay on "The Æsthetic Value of Concrete as a Monumental Building Material." W. T. Evans (Haverfordwest), first prize for a set of measured drawings of St. David's Church, Hubberston, Pembrokeshire. Elwyn J. Rees, first prize, and John Nicholls (Neath), second prize, for designs for combined electric railway station and bus centre at Oystermouth.

MR. MORRISON ON BRIDGE CONSTRUCTION

Mr. Herbert Morrison, the Minister of Transport, replying to the toast of "His Majesty's Ministers" at the annual dinner of the Institution of Civil Engineers on Wednesday last, said that in the last five years two thousand bridges, varying from small culverts to a structure such as the Newcastle-Gateshead bridge, had been undertaken with the aid of grants from the Ministry, and at the present time Parliament had under consideration the biggest scheme of all, the Charing Cross Bridge. At this period of acute unemployment he was anxious to expedite the reconstruction of weak bridges and the elimination of level crossings over classified roads, and he would encourage the engagement of consulting engineers to supplement the efforts of the technical staffs of local authorities.

Speaking of the Charing Cross Bridge controversy, he said he had had delicately to hint to the architects that he could not regard them as engineers or traffic experts, but nobody was more anxious than he was that the architect should be consulted and employed no less than the engineer in every case where there was a useful sphere for his creative art.

LONDON MASTER ASPHALTERS AT DINNER

The tenth annual dinner of the London Master Asphalters' Association was held at the Restaurant Frascati, Oxford Street, recently. Mr. W. T. Faldo presided over a gathering of about 180.

In response to the toast of "The Association" by Mr. F. Sutcliffe, F.R.I.B.A., Mr. Faldo, president, who has taken office for the second year in succession, said that one of the many important questions which confronted them was that of the sub-contract. He pointed out that the Association had used its best endeavours to get this matter settled and, in conjunction with the National Federation of Sub-Contractors, they had now produced a standard form of sub-contract, which he thought was the most equitable and fair of this kind that had ever been produced. In that form of contract they had had to take into account the difficulties not only of their own trade, but of twenty-five or twenty-six other trades which were associated with the building industry.

Other toasts and responses were given by Messrs. George Mitchell, H. Woodward Aston, T. Bolton, G. J. Spicer, and T. H. Knight.

During the evening Mr. R. D. Daniels was presented by Mr. Faldo with a cigarette case for services rendered to the Association.

WATER SUPPLY OF ANCIENT ROME

Sir Banister Fletcher, P.R.I.B.A., lecturing at the L.C.C. School of Arts and Crafts, described the tombs and works of public utility—aqueducts and bridges—of the Romans. He explained how water was supplied to Rome by stupendous aqueducts on great arches which carried the water in a covered "specus," free from contamination.

DAMP IN BUILDINGS

A lecture on the Knapen systems for the cure and prevention of damp and the aeration of buildings was delivered last Thursday at the Manchester School of Technology, under the auspices of the Society of Ancient Monuments, by Colonel John Brown. Mr. J. T. Halliday, president of the Manchester Society of Architects, presided.

[The Knapen systems were fully described and illustrated in our issue for December 25, 1929.]

ANNOUNCEMENTS

The Kent County Council has appointed Mr. Sidney H. Loweth, A.R.I.B.A., M.R.SAN.I., as deputy county architect.

Messrs. Unsworth and Goulder, F. AND A.R.I.B.A., have removed their offices to No. 28 Essex Street, Strand, W.C.2. Telephone numbers: Central 2304 and 2305.

Mr. Laurence M. Gotch, F.R.I.B.A., late of the firm of Gotch and Saunders, of Kettering and London, is now practising under his own name, at St. Mildred's Court, Poultry, London, E.C., whilst his late partners are continuing the practice at Kettering under the old title.

Mr. A. J. Healey, F.R.I.B.A., of 29 George Street, Hanover Square, W.1, has taken into partnership Mr. F. W. MacKenzie, L.R.I.B.A. The title of the firm will be Healey and MacKenzie, F. AND L.R.I.B.A., architects and surveyors, and they will practise at the above address.

TRADE NOTES

The Stanton Ironworks Company, Ltd., near Nottingham, have acquired the sole British rights of the Victaulic Joint for use with cast-iron pipes. The Victaulic Joint, it is claimed, gives flexibility to a pipe line at each of the joints, and it is anticipated that in the hands of the Stanton Company this joint will be extensively adopted for cast-iron pipes, thereby introducing flexibility into cast-iron mains. In connection with this company's spun pipe, a special form of Victaulic Joint has been designed which obviates the use of the housing.

The calendar for 1930 of the Travel Association of Great Britain and Ireland contains a day-to-day diary of 500 leading events of 1930 throughout the British Isles; lists of shows, exhibitions, festivals, celebrations and old-world customs; information upon a score of different subjects, including customs, passports, taxes, means of transport, motoring, hotels, postal arrangements; and notes on some special features of life in this country which are particularly attractive to visitors from abroad, and in which the position of this country is unique, such as the high standard of general health, its notable spas and resorts, the facilities for sports, the love of pageantry and the attractions of our flower gardens. The calendar is intended for circulation abroad and will be issued in four editions. The English edition of half a million copies is now out and is being despatched abroad. This edition will be followed by 300,000 copies in French, Spanish and German.

An increasing number of architects are availing themselves of the advantages to be derived in the execution of building and other contracts by the use of Eccostats: prints made from any subject drawn, written or printed, by means of large-size, high-speed bromide cameras, using sensitized paper in the place of plates or films. The prints may be of the same size as the original, or enlarged or reduced views of it. Direct copies are exact reproductions of the originals except that the colours are reversed; thus a blueprint when copied gives a black-line print, and a black line subject such as a pencil or ink drawing gives a white-line copy. By re-copying the white-line print a black-line Eccostat is obtained, a fascimile of the original. Tints are reproduced in monochrome as greys. Portions of originals not required can be blocked out and will not appear on copies. Eccostat black-line prints can be worked on in pencil, ink or colour. They are permanent, and can be folded without injury. This form of printing is claimed to be the quickest and cheapest means of 1: Obtaining indisputable copies of documents, leases, ledger accounts, letters, policies and contracts with their original signatures and stamps; 2: Copying engineers' blueprints; 3: Copying maps, pages of books, etc.; 4: Providing legible miniature copies of plans and data sheets for binding in filing covers, or for transmission by post; 5: Enlarging and reducing drawings and outlines to different scales for re-tracing, etc. Eccostats are made by the Engineering and Commercial Copying Co., Ltd., 137 Victoria Street, Westminster, S.W. 1.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Westminster Bank, Doncaster (pages 387-389). General contractors, J. T. Wright and Sons. Sub-contractors: Wm. Bellerby, Ltd., counters and fittings; G. and A. Brown, Ltd., decorative plaster work; Fenning & Co., Ltd., marble and external granite work; Waring, Withers and Chadwick, electrical installation; Waygood-Otis, Ltd., bullion lift; Northern Rubber Co., rubber paving; N. F. Ramsay & Co., bronze book racks, standards, and hardware; Val de Travers Asphalt Co., asphalting; James Walker, stone carving; Stuarts Granolithic Co., Ltd., artificial stone; F. J. Barnes, Ltd., Portland stone; Luxfer Ltd., pavement lights and metal windows; Benham and Sons, Ltd., heating and hot water; Fawcett Construction Co., Ltd., reinforced concrete; Art Pavements and Decorations, Ltd., wall tiling, Terrazzo floors, marble sills, and radiator bases; Jos. F. Ebner, wood block floors; Ed. Wood & Co., steelwork; Wm. Bellerby, Ltd., joinery; Dent and Hellyer, Ltd., plumbing and sanitary work; Fawcett Construction Co., Ltd., suspended floors and roofs on the Mon'lithcrete and Tubular systems.

House at Rhiwbina (pages 408-409). General contractors, Ben. Thomas & Co., Ltd. Sub-contractors: W. Small & Co., roofing; Page and Stibbs, electrical; Williams and Borgars, Ltd., sanitary fittings, grates, locks and ironmongery.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W. 1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C. 2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

5009. Brooke, H. Building construction. February 14.

4813. Carey, W. L. de M. Building construction. February 13.

4961. McKenzie, J. T. Means for refixing loose slates or tiles on roofs. February 14.

4777. Walker, F. T. Building construction. February 12.

4833. Wright, N. W. Construction of sectional buildings. February 13.

COMPETITION CALENDAR

March 10. The Council of the Metropolitan Borough of Greenwich invites architects to submit designs for a drinking fountain, which it is proposed to erect at Blackheath on a site facing the War Memorial at the junction of Maze Hill and Charlton Way. Premiums: £50, £20 and £10. Particulars of the competition and a copy of the site plan may be obtained from Frederick J. Simpson, Town Clerk, Town Hall, Greenwich Road, S.E. 10. Latest date for applications: March 10.

March 31. — The Accrington Corporation invites architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor: Herbert J. Rowse, F.R.I.B.A. Premiums: £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars, may be obtained from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before March 31.

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated in 1930. Assessors: Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums: £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs: April 28.

June 14. — The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to Mr. W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.).

July 31.—The Luton Town Council invites architects to submit designs for the proposed Town Hall which is to be built on the site of the old town hall, at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500 to £100. Latest date for submission of designs: July 31.

No date.—The Leicester Corporation invites local architects to submit designs for the erection of a library at West Humberstone. Assessor: Hugh Gold, F.R.I.B.A. Premiums: £75, £50, and £25.

Mr. Vincent Harris, F.R.I.B.A., has been appointed assessor for Johannesburg's new library and museum, which is to be erected at a cost of £200,000.

The Crook Urban District Council has received fourteen designs in the limited competition for the new town hall and council chamber which it is proposed to be erected in the Market Place, Crook. Mr. F. Willey, F.R.I.B.A., of Durham, has been appointed assessor.

THE ARCHITECTS' DIARY

WEDNESDAY, MARCH 5

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper by L.A.P.A. **8 p.m.**

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Roman Architecture." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

INSTITUTION OF SANITARY ENGINEERS. At 296 Vauxhall Bridge Road, S.W.1. "Civic Sanitary Engineering." By Alderman G. Marlow Reed. **6.30 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Students' Meeting. "Long-Distance Gas-Transmission." By Henry F. H. Jones, B.A., STUD.INST.C.E. Thomas Hardie, M.INST.C.E., will preside. **6.30 p.m.**

AUCTIONEERS AND ESTATE AGENTS' INSTITUTE, 29 Lincoln's Inn Fields, W.C.2. "The Rating of Licensed Premises." By William Townsend. **7.30 p.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C. 2. Open every Tuesday, Wednesday, Thursday, and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

LONDON BUSINESS EFFICIENCY EXHIBITION, White City, Shepherds Bush, W. Open until March 15.

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Ordinary Meeting. "The Ford Factory, Dagenham." By Major E. H. Heathcote, M.A.(CANTAB.), F.R.I.B.A., A.M.INST.C.E., A.M.I.MECH.E. **7 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Swedenborg Hall, 20 Hart Street, Bloomsbury, W.C.1. Discussion on "The Space Required for Central Station Equipment." **7 p.m.**

THURSDAY, MARCH 6

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting: Nomination of Officers. "Classic Forms and English Geology." By Hope Bagenal, D.C.M., A.R.I.B.A. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Plywood: Its Influence on Modern Furniture Design." By Percy A. Wells. (Lantern Illustrations.) **7.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual Dinner at the Florence Restaurant, Rupert Street, W.1. 7.15 for 7.30 p.m. **7.15 p.m.**

FRIDAY, MARCH 7.

L.C.C. SCHOOL OF BUILDING, Ferndale Road, S.W. 4. Exhibition of work, and distribution of prizes for the session 1928–9. The Rt. Hon. Philip Snowden, M.P., will present the prizes. H. D. Searles-Wood, F.R.I.B.A. will preside. **7 p.m.**

SOUTH EASTERN SOCIETY OF ARCHITECTS. At the Guildhall, Canterbury. "Beautifying our Surroundings." By R. Goulburn Lovell, A.R.I.B.A. The Mayor, the Rev. S. Gordon Wilson, B.LITT., A.K.C.L., F.R.HIST.S., will preside. **8 p.m.**

SATURDAY, MARCH 8

Sunrise, 6.32 a.m. Sunset, 5.51 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Old and New Architecture." By the Hon. Humphrey Pakington, A.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

MONDAY, MARCH 10

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Borough Polytechnic, Borough Road, Southwark, S.E.1. "Some District Heating Systems." By L. J. Fowler, B.A. **6.30 p.m.**

SURVEYORS' INSTITUTION, 12 Great George Street, Westminster, S.W.1. "Recent Development in Electricity Supply in Great Britain, with Special Reference to Rural Electrification." By Sir Harry Haward (Electricity Commissioner). **8 p.m.**

TUESDAY, MARCH 11

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts. Eighth of a course of nine public lectures on "Italian Painting." By Percy Dearmer, M.A., HON. A.R.I.B.A. **5.30 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. "Reconstruction of Liskeard Viaduct, and Scheme for Reconstruction of the Approach Spans of the Royal Albert Bridge, Saltash." By Harold Duke Smith, M.INST.C.E. "Reconstruction of Approach Spans, Royal Albert Bridge, Saltash." By Frank Gibbons, B.A., B.A.I., M.INST.C.E. "Reconstruction of Kent and Leven Viaducts, Furness Section of the London, Midland and Scottish Railway." By James Alexander, M.INST.C.E. **6 p.m.**

WEDNESDAY, MARCH 12

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Informal Meeting. "Land Reclamation Work." By F. M. G. Du-Plat-Taylor, M.INST.C.E. Sir Cyril Kirkpatrick will preside. **6 p.m.**

THURSDAY, MARCH 13

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate on "Is the Skyscraper Architecture?" Affirmative, D. B. Smith. Negative, G. L. Crowther. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Walnut and Mahogany Furniture from 1710 to 1750." By Herbert Cescinsky. **7.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Pyramid Building Problems: Manpower Organization in the Pyramid Age." By D. Davidson, F.R.S.A. **6.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **6 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Annual Dinner to be held at the Adelphi Hotel, Liverpool. **7.30 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. "Charing Cross Bridge." By Lieut.-Colonel Sir Kenyon Vaughan Morgan, M.P. **4.30 p.m.**

FRIDAY, MARCH 14

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At Loughborough. Ordinary Meeting. "Some Experiments on Earth Pressure." By Dr. T. E. N. Fargher, M.ENG.PH.D., A.M.INST.C.E. **6.30 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to the Science Museum, Exhibition Road, South Kensington, S.W. 7. 2.30 p.m. At the Royal Society of Arts, John Street, Adelphi, W.C. 2. "The Decentralization of Industry." By Dr. Raymond Unwin. 5 p.m. **2.30 p.m.**

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Sessional Meeting. At the Council Chambers, Middlesbrough. Discussion on: "Ventilation of Cinemas, etc." To be opened by S. W. Walton, M.B., B.S., D.P.H. 4 p.m. Tea 5 p.m. Visit to the New School Clinic, Woodlands Road. 6 p.m. Discussions on "Ventilation of Cinemas, etc.," and "Flooding from Streams at Middlesbrough." To be opened by S. E. Burgess, M.INST.C.E. **7 p.m.**

TOWN PLANNING INSTITUTE. At the Caxton Hall, Caxton Street, Westminster, S.W.1. General Meeting. "Town Planning and the Man in the Street." By Capt. B. S. Townroe, M.A., HON. A.R.I.B.A. **8 p.m.**

SATURDAY, MARCH 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Messrs. Gamage's New Premises, near Marble Arch. Meet at entrance in North Row. **2.30 p.m.**

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At the Council Chamber, Middlesbrough. Meet at the Municipal Buildings for visits to Housing Scheme areas: Acklam Hall, Middlesbrough, Redcar Main Trunk Road, and Main Sewer Works, Cargo Fleet Lane. **10.30 a.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Students' Visit to the Building Research Station, Watford.

MONDAY, MARCH 17

R.I.B.A., 9 Conduit Street, W.1. General Meeting. Presentation of the Royal Gold Medal. **8.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "High Tension Sub-station Control Gear." To be opened by A. F. Harmer. **7 p.m.**

TUESDAY, MARCH 18

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts, Last of a course of nine public lectures on "Italian Paintings." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. Paper on "The Lighting of a Large Liner." Light Refreshments at 6.30 p.m. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Voltage Control of Large Alternators." By H. W. Taylor. **7 p.m.**

INSTITUTE OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. "Electric Locomotives." By D. J. Watkins.

WEDNESDAY, MARCH 19

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Annual Reception. **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Design in Town Planning." By Dr. Raymond Unwin, F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Portrait in Later Monumental Sculpture." By K. B. Esdaile (Mrs.). Charles Reed Peers, C.B.E., P.S.A., F.B.A. will preside. **8 p.m.**

THURSDAY, MARCH 20

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. Election of Officers. "Mainly About Germany." By Howard Robertson, F.R.I.B.A., S.A.D.G. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "London in the Middle Ages." By D. Martin Roberts, M.A. (Lantern Illustrations.) **7.30 p.m.**

FRIDAY, MARCH 21

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Annual Meeting at the Royal Institute Galleries, Piccadilly, W.1. 3 to 5.30 p.m. **3 p.m.**

SATURDAY, MARCH 22

Sunrise, 6 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Houses at Home and Abroad." By Oswald P. Milne, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Post Office (London) Railway, Mount Pleasant N.W. **4 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to the offices of the Allied Newspapers, 200 Gray's Inn Road, W.C. 1. 4.30 p.m. and 6.30 p.m. **4.30 p.m.**

MONDAY, MARCH 24

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Style in Sculpture." By Eric Gill. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

TUESDAY, MARCH 25

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Dominions and Colonies Meeting. "The Work of the British Association in Relation to the Empire." By O. J. R. Howarth, O.B.E., M.A. **4.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North Midland Centre. At the Hotel Metropole, Leeds. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

WEDNESDAY, MARCH 26

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Architecture of To-day and To-morrow." By Howard Robertson, M.C., F.R.I.B.A., S.A.D.G. Charles Marriott, HON. A.R.I.B.A., will preside. **8 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Nature and Modern Design." By Professor R. V. Gleadowe. (Lantern Illustrations.) **7 p.m.**

THURSDAY, MARCH 27

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Some New Ideas on the Design of Dams." By E. Godfrey. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Lacquerwork: Its History, Influence and Decorative Qualities." By E. R. Gribble. **7.30 p.m.**

FRIDAY, MARCH 28

INSTITUTION OF ELECTRICAL ENGINEERS. North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Marine Diesel Installations, with particular reference to Auxiliary Machinery." By J. Calderwood, M.SC. **7.15 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Annual General Meeting. Discussion on "Mechanical Solution of Statically Indeterminate Structures." To be opened by H. W. Coultas, M.SC. **6.30 p.m.**

SATURDAY, MARCH 29

Sunrise, 5.44 a.m. Sunset 6.27 p.m.

MONDAY, MARCH 31

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "Loud-Speakers." To be opened by Captain P. P. Eckersley. **7 p.m.**

ACCRINGTON COMPETITION. Latest date for submission of designs for the New Police and Fire Stations.

TUESDAY, APRIL 1

INSTITUTION OF ELECTRICAL ENGINEERS. North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper by H. Stratton Davis, M.C., F.R.I.B.A. **8 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Annual Business Meeting. **7 p.m.**

WEDNESDAY, APRIL 2

LONDON SOCIETY, Lancaster House, St. James's, S.W. 1. Visit to Wellington Barracks and the Guards' Chapel, under the guidance of Sir Neville R. Wilkinson, K.C.V.O., F.S.A. **2.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Tees-side Sub-Centre. At the Cleveland Technical Institute, Middlesbrough. Annual General Meeting, 7 p.m. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." 7.30 p.m. **7 p.m.**

THURSDAY, APRIL 3

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. **7 p.m.**

SATURDAY, APRIL 5

Sunrise, 5.29 a.m. Sunset, 6.38 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Marble Arch Flats, adjoining Regal Cinema. Meet main doorway in Great Cumberland Place at 2.30 p.m. **2.30 p.m.**

MONDAY, APRIL 7

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Antonio da San Gallo the Younger." By J. Hubert Worthington, O.B.E., M.A., A.R.I.B.A. **8 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The ADDISCOMBE Garden Estates, Ltd., are to erect shops at the junction of Selsdon Park Road and Addington Village Road.

In connection with the CHARING CROSS Bridge scheme the L.C.C. is making arrangements for the rehousing of some 5,000 people who will be displaced. About 1,000 people will be rehoused in Lambeth.

Plans passed by the CROYDON Corporation: Six houses, Hillcote Avenue, for Mr. H. Macintosh; twenty-four houses, Barnfield Avenue, and ten houses, Shirley Avenue, for Messrs. Paish, Tyler and Crump; alterations and additions, 48–50 North End, for Messrs. Truett and Steel, Ltd.; ten garages, Stafford Road, for Mr. S. H. Laver; fourteen houses, Pilgrims Close, twenty-one houses, Brickfield Road, and twenty houses, Carolina Close, for Mr. R. Pierson; shop and warehouse, 150 High Street, for Mr. M. K. Matthews; work and handicraft rooms, Selsdon Road school, for Mr. T. Rigby; fifteen houses, Croham Valley Road, for Mr. G. W. Peachey; transformer house, off Purley Way, for Messrs. MacDonald and Allison; additions, depot, Purley Way, for Messrs. Carter Paterson & Co.; three shops with flats, London Road, for Mr. R. Cohen; four houses, Tennison Road, for Mr. W. Ernest; two bungalows, Mead Way, for Spring Park Estate, Ltd.; alterations and additions, 26 High Street, and stores, 27 High Street, for Mr. E. Bates; four houses, Woodside Green, for Mr. H. N. Dering; factory and offices, Purley Way, for Mr. F. S. Smith; two shops, Beulah Hill, for Mr. E. Bates; shop front and alterations, 44 High Street, for Messrs. John Curtis and Son; workshop, Fairlands Avenue, for Messrs. Jupp and Ryan; ten garages, Blunt Road, for Mr. F. Roe; bottling stores, the Brewery, High Street, for Mr. C. H. Ridge; twenty-seven houses, Limes Avenue and Wandle Side, for Mr. F. H. Willcocks; four houses, Grenaby Avenue, for Mr. Edwin Smith; extensions, Mayday Road hospital, for Messrs. Berney and Son; thirty-two houses, Westway, Spring Park Estate, for Messrs. M. Brown and Son (Bournemouth), Ltd.; aeroplane hangar, Addington, for the Horseley Bridge and Engineering Co.

The HACKNEY B.C. is acquiring property for the extension of the town hall in Hackney Grove.

The HACKNEY B.C. is purchasing a site in Hackney Road for the erection of tenements, at a cost of £7,925.

Plans passed by the HACKNEY B.C.: Alterations, 187 Brooke Road, for Mr. E. Pearce; alterations, "The Cricketers" public-house, 181 Clarence Road, for Mr. E. Lancaster; alterations, 82 Filey Avenue, for Messrs. Sherrington and Jinks, Ltd.; alterations, the Clapton Stadium, Millfields Road, for Clapton Stadium, Ltd.; alterations, "Spread Eagle" public-house, 224 High Street, Homerton, for Messrs. Watney, Combe, Reid & Co.

The Board of Education has approved the plans of the ILFORD Education Committee for the erection of a temporary school at Golf Road, at a cost of £5,000.

The LEWISHAM B.C. has approved plans for the erection of flats at Winchfield Road, Sydenham, at an estimated cost of £28,720.

Plans passed by the LEWISHAM B.C.: Rebuilding, 86 Courthill Road, for Mr. P. B. Dannatt; building, rear 2 Silverdale, for Mr. G. J. Bulford; additions, 213 High Street, for Messrs. W. H. Gaze and Sons; additions, "Foresters' Tavern," Perry Vale, Forest Hill, for Messrs. Hoare & Co., Ltd.; shops, High Road, Lee, for Mr. J. Brown.

The ST. PANCRAS B.C. is to reconstruct Albert Road canal bridge, at a cost of £12,000.

The L.C.C. Education Committee has approved plans for remodelling Haggerston Road school, SHOREDITCH, at an estimated cost of £15,700.

SOUTHERN COUNTIES

Plans passed by the BRIGHTON Corporation: Alterations, 38 Lavender Street, for Portsmouth United Breweries; rebuilding, 35–37 West Street, and 1–3 Cranbourne Street, for Messrs. Bostel Bros., Ltd.; extension to operating box, Cinema de Luxe, 150 North Street, for Cinema House, Ltd.; restaurant, etc., 82–83 King's Road, for Mr. H. Sado; shops, Lewes Road, for Brighton Equitable Co-operative Society; five shops, Belvedere Terrace, Montpelier Place, for Palmeira Avenue Mansions Estate Co.; extensions to dairy, Islingword Road, for Brighton Equitable Co-operative Society; alterations, 7–8 Manchester Street, for Portsmouth United Breweries; rebuilding, 139–140 North Street, for Sun Insurance Co., Ltd.; two houses, Harrington Villas, for Mr. T. R. Braybon; alterations, 40–40A North Street, for Mr. S. Zeff; railway station, Madeira Road, for Mr. M. Volk; alterations, Royal Crescent Hotel, Marine Parade, for the Royal Crescent Hotel Co., Ltd.

The GUILDFORD Corporation has approved plans prepared by Messrs. Dodd and Watson, consulting engineers, for new sewage disposal works, at an estimated cost of £51,100.

Plans passed by the GUILDFORD Corporation: Alterations and additions, North Street, for Messrs. Cow and Gate, Ltd.; two houses, Aldershot Road, for Mr. Piner; two cottages, Ardmore Estate, Manor Road, and four cottages, Manor Road, for Mr. W. Hoptroff; three shops, Chapel Street, for Messrs. J. Hepworth and Son, Ltd.; alterations and additions, Epsom Road, for the Guildford Garage, Ltd.; alterations and additions to packing house, High Street, for Messrs. Chas. Holden, Ltd.; house, Stockton Road, for Mr. F. Stacey; two houses, Manor Road, for Mr. G. C. Watts; house, Nightingale Road, for Mr. J. H. Gafford; house, Worplesdon Road, for Mr. A. H. Blake; covering-in yard, 143 High Street, for Messrs. J. Sainsbury, Ltd.

Plans passed by the HERNE BAY U.D.C.: Bungalow, Pier Avenue, for Messrs. Goodwin and Russell, Ltd.; bungalow, Spenser Road, for Mr. E. Porter; two houses, Ivanhoe Road, and four houses, Oakdale Road, for Herne Bay Estates, Ltd.; bungalow, Albany Drive, for Mr. H. Pettman; conversion of house into shop, 38 High Street, for Mr. R. Messenger; bungalow, Grand Drive, for Mr. W. Hancock; building, Arkley Road, for Messrs. Court Bros.; house, Western Esplanade, for Mr. A. E. Collings.

The NEWBURY Corporation Water Committee has decided to invite tenders for the construction of a reservoir, a pumping station and an attendant's house at Cold Ash.

Plans passed by the NEWBURY Corporation: House, Enborne Road, for Messrs. Cooke Bros.; alterations and additions, 17 Cheap Street, for Mr. L. Rhodes; four flats, Station Road, for the Empire Building and Trading Co.; alterations, 1 London Road, for Mr. S. Willcox.

The NORTHFLEET U.D.C. has sold a site on the Wombwell estate to the Kent Education Committee for the erection of a school.

The Brighton Corporation has obtained sanction for a loan of £25,730 for sewerage works at ROTTINGDEAN.

SOUTH-WESTERN COUNTIES

The PORTLAND U.D.C. recommends a site in Victoria Road for the erection of houses.

MIDLAND COUNTIES

The Board of Education has approved the plans of the Notts Education Committee, for the erection of elementary school accommodation at Lenten Abbey, BEESTON, at an estimated cost of £45,500.

The BIRMINGHAM Education Committee has acquired sites in Peckham Road, Perry Bar, and at Highters Wood, Yardly Wood, for the erection of two elementary schools.

Plans passed at BURSLEM: Two houses, Market Street, for Mr. T. Wint; additions, Ceramic Transfer Works, for Mr. H. Taylor; warehouse, Fountain Place Works, for Mr. E. Tatton; additions, Davenport Street, for Messrs. J. E. Smith, Ltd.; eight houses, off Hanley Road, for Messrs. Shenton Bros.; eight houses, Milton Road, for Mr. B. S. Phillips.

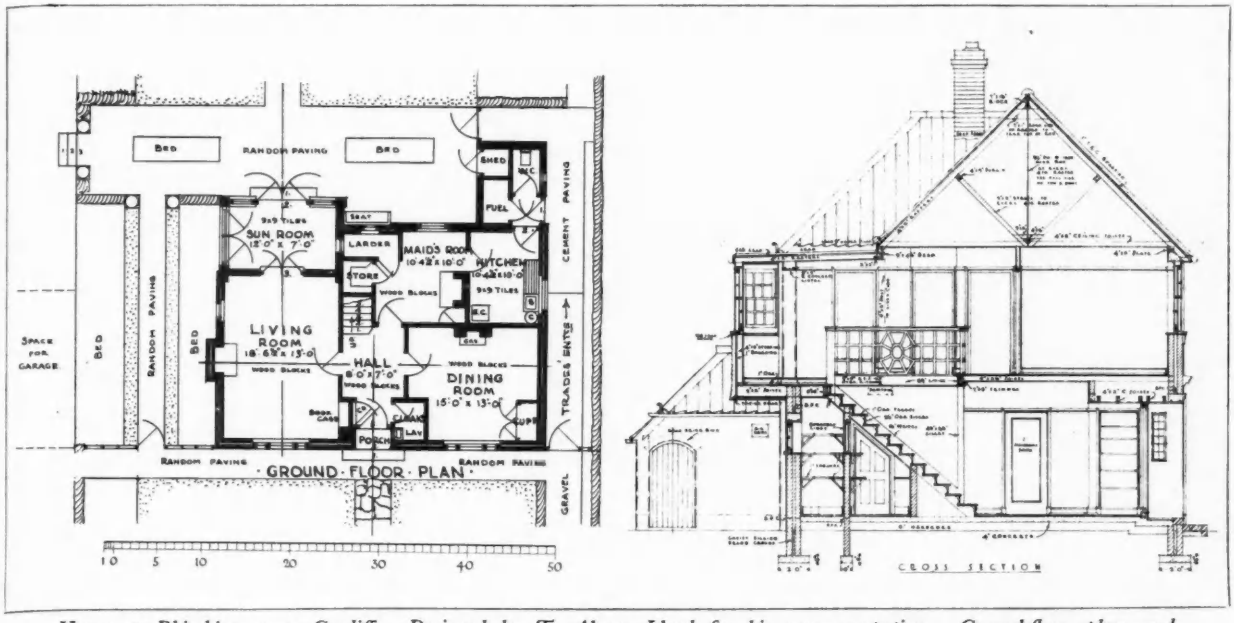
Plans passed by the GLOSSOP Corporation: Alterations and additions, Hadfield Conservative Club, for the club committee; stitching rooms, etc., Charlestown Bleachworks, for Messrs. John Walton, Ltd.; two houses, Fauvel Road, for Messrs. Sidebottom and Jackson; alterations, 4 Norfolk Street, for Mr. V. Shirt; additions and alterations, Roebuck Inn, for Messrs. Openshaw Brewery Co.

Plans passed at HANLEY: Alterations and additions, 8–10 Bagnall Street, for Mr. W. Rees-Jones; additions, Cliffe Vale Potteries, Newcastle Road, for Messrs. Twyfords, Ltd.; alterations, Cannon Street, for Cauldon Potteries, Ltd.; additions, Norfolk Street, for Howard Pottery Co., Ltd.; two bungalows, Eaves Lane, for Messrs. Withington Bros.; additions, Festing Street, for Messrs. T. and R. Boote, Ltd.; alterations, Capital Cinema, New Street, for Associated British Cinemas, Ltd.; alterations, Eagle Inn, Bethesda Street, for Messrs. Ind, Coope & Co., Ltd.





An architect's house, Rhiwbina, near Cardiff. This building was designed by T. Alwyn Lloyd for his own occupation. The main front (left) and the garden side (right). The elevation to the road has been formally treated to be in keeping with adjoining new houses, with level eaves and mullioned sash windows. The external walls are of 11-inch cavity brickwork, covered with cement roughcast, colour-washed cream. The roof, which is boarded and felted, is covered with hand-made Bridgwater pantiles.



House at Rhiwbina, near Cardiff. Designed by T. Alwyn Lloyd for his own occupation. Ground-floor plan and cross-section. The entrance hall gives off to dining and living rooms, maids' room, the "cloaks," and the staircase, which is recessed between walls. The flooring is of wood blocks, with the exception of the sun room, which is quarry tiled. On the first floor are three bedrooms, guest room, dressing-room, boxroom, bathrooms and lavatory accommodation.

The LEICESTER Corporation is to proceed with a further section of the tributary sewerage scheme, at a cost of £31,000.

The LEICESTER Corporation is to proceed with a further section of the museum extension scheme, at an estimated cost of £13,825. Mr. A. Herbert, F.R.I.B.A., has been appointed architect.

The LEICESTER Education Committee is to erect an elementary school in Taylor Street, at a cost of £40,000. Messrs. G. Lawton Brown and Percy Jones are the architects.

The Board of Education has approved plans for the new building of the County School of Art, MANSFIELD, at an estimated cost of £8,500.

The Stoke-on-Trent Corporation has purchased twenty-six acres of land at Cornhill, NORTON, for a housing scheme.

The NOTTS C.C. has prepared the following improvement schemes: Constructing new road to by-pass Bingham on the south, £4,000; widening from Edwinstowe Village to junction, £13,000; widening road to 60 ft. from near West Bridgford to the junction with the Fosse Way, £45,000; constructing new road to by-pass Ollerton, £7,000; construction of by-pass road at Plumtree, £18,000; widening road to 60 ft. from the junction with A.614 to the junction with A. 611, £70,000; widening road to 60 ft. from Wollaton to the county boundary at Trowell, £25,000; constructing by-pass road at Coddington, £5,000; constructing by-pass road at Aversham, £2,000; widening West Bridge over the River Poulter, near Normanton Inn, £4,000; widening bridge over River Meden at Budby, £2,000; widening two bridges over River Erewash, near Toton, £5,000; widening bridge over River Trent at Kelham, £10,000; widening bridge over river near Hallougnton, £1,500; widening bridge over canal at Ranby, £8,000; new bridge in place of level-crossing at Checkerhouse station, £25,000; widening bridge over canal at Trowell, £5,000; widening bridges over canal and London, Midland and Scottish Railway near Wollaton, £10,000; and widening bridge over canal at Hayton, £4,000.

The Stoke-on-Trent Education Committee has obtained a site in Wellesley Street, SHELTON, for the erection of an elementary school.

Plans passed by STOKE-ON-TRENT Corporation: Additions, Shelton New Road, for Messrs. Bass, Ratcliff and Gretton, Ltd.; house, Cauldon Road, for Mr. H. Kemmerley; two houses, Lancaster Road, for Messrs. Hollins and Jones; alterations, Princes Road, for North Staffs Royal Infirmary; two houses, Trafalgar Road, for Mr. J. Dimbleby; mixing house, North Hanford, for Stafford Coal and Iron Co.; butcher's shop, York Street, Basford, for Mr. F. Northall; engine house, Foley Road, Longton, for Messrs. Jackson and Gosling; three houses, Kensington Road, Oakhill, for Messrs. Holloway & Co.; shop and house, Stone Road, Hanford, for Mr. G. Peace.

NORTHERN COUNTIES

The CHESTERFIELD Corporation is obtaining another eight acres of land on the St. Augustine estate for housing purposes.

The CHORLEY Corporation has passed layout plans of the Springs Road site, prepared by the borough surveyor, providing for approximately ninety-three houses.

Plans passed by the CHORLEY Corporation: Amended layout and plan of sewers, for Gillibrand Estates, Ltd.; nine houses, Letchworth Drive, eleven houses, Collingwood Road, and two bungalows, Claremont Avenue, for Messrs. J. W. Lee, Ltd.; bungalow, Sandridge Avenue, for Mr. Clulow; three houses, Blackburn Road, for Messrs. Barnes Bros.; extensions to building, Union Street, for Messrs. A. Fletcher, Ltd.; new hospital, Preston Road, for the Governors of Chorley Hospital.

The Lancashire Education Committee is to erect a junior and senior school at DENTON, at a cost of £11,200.

The Lancashire Education Committee has obtained sanction for a loan of £32,000 for the erection of extensions at HUTTON Grammar School.

The Lancashire Education Committee has obtained sanction to borrow £26,000 for the erection of new buildings for POULTON BAINES Grammar School.

The Lancashire Education Committee is to erect a senior school at POULTON LE FYLDE.

The Lancashire Education Committee has purchased a site at Sedgeley, PRESTWICH, for the erection of a junior and infants' school.

The SHIPLEY U.D.C. Housing Committee has instructed the surveyor to prepare a layout for the erection of houses upon sites to be purchased at Busy Lane and off Carr Lane.

The SOUTH SHIELDS Corporation Housing Committee is acquiring land at East Jarrow, and has authorized the borough engineer to prepare plans for the erection of houses for the working classes to be erected thereon.

Plans passed by the SOUTH SHIELDS Corporation: Conversion of shop into flats, 65 South Eldon Street, for Mr. F. W. Newby; alterations, "Garden Gate" public-house, Havelock Street, and alterations Norfolk and Suffolk Hotel, Market Place, for Messrs. T. A. Page and Son.

Plans passed by the TYNEMOUTH Corporation: Six houses, Creswell Avenue and Ancroft Avenue, for Mr. A. K. Tasker; extension to hairdressing saloon, The Allotment, for Mr. R. Ellison; twelve houses, Wansbeck Avenue, Cullercoats, for Messrs. Beautyman and Gray; six houses, Mast Lane, for Mr. H. D. Burton; alterations, High Lighthouse, for Mr. R. F. Hindmarsh, on behalf of Tyne Improvement Commissioners; two bungalows, Highbury Place, for Messrs. F. R. N. Haswell and Son; layout Hawkey's Lane Estate, North Shields, for Messrs. Brannen; bakehouse, Charlotte Street, North Shields, for Mr. W. Stockdale.

The YORK Corporation has authorised the city engineer to obtain tenders for the erection of 100 houses on the Burton Stone Lane Estate.

Plans passed by the YORK Corporation: Additions, James Street, for British Petroleum Co., Ltd.; offices, Aldwark, for Messrs. J. Holmes & Co.; garage, Barbican Road, for West Yorkshire Road Car Co.; extensions, Mount School, Dalton Terrace, for the Education Committee; layout of land, Acomb Road, for Backhouses, Ltd.; offices, Museum Street, for Mr. J. Hetherton; additions, Picture House, Coney Street, for Provincial Cinematographs, Ltd.; four houses, Heworth Hall Drive, for Messrs. T. and M. Caffrey; additions, Hull Road, for Tang Hall Working Men's Club and Institute; factory, Hull Road, for Mr. P. Lazenby; additions, 61 Gillygate, for Mr. R. Williams; additions, Layerthorpe Grove, for Messrs. F. L. and A. London; four houses, Winchester Grove, for Mr. W. E. Puckering; additions, Coney Street, for Messrs. J. B. Inglis and Son; additions, Market Street, for Public Benefit Boot Co.; four houses, Ainsty Avenue, Dringhouses, for Ainsty Building Estates, Ltd.

WALES

The MERTHYR borough engineer has prepared plans for the erection of an administrative block at the isolation hospital, at a cost of £16,500.

SCOTLAND

The following figures show the progress that has been made in State-aided housing schemes in Scotland to January 31, 1930: 1919 Act, by local authorities, 25,129: 1919 Act, by public utility societies, 421; private subsidy schemes, 1919 Additional Powers Act, 2,324; slum clearance schemes, 11,108; under construction, 2,142: 1923 Act, by local authorities, 4,028; under construction, 2: 1923 Act, by private enterprise, 17,643; under construction, 1,242: 1923 Act by public utility societies, 80: 1924 Act, by local authorities, 42,110; under construction, 5,174: 1924 Act, by private enterprise, 1,431: under construction 1,499: 1924 Act, by public utility societies, 127; demonstration houses, 17; steel houses erected on behalf of Government by Scottish National Housing Company, 2,552. Total completed, 106,970; total under construction, 10,059. Total, 127,029.

MISCELLANEOUS

Plans passed by the DOUGLAS (I.O.M.) Corporation: Additions, 7 Palace Road, for Mr. Blincoe; first-aid station and lounge, Cunningham Holiday Camp, Victoria Road; waiting-room over foyers, Picture House, Strand Street, for the Strand Cinema Theatre Co.; shop, rear of 32 Circular Road, for Mr. T. W. Bridson; alterations, 96 Strand Street, for Mr. Thomas.

At a meeting of the ISLE OF ELY C.C. the county surveyor submitted amended drawings for Adelaide Bridge, Prickwillow, the general plan of which has been approved by the Ministry of Transport and the engineer of the Ouse Drainage Board.

E

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B_1	Chatham ..	S. Counties	1 4½	1 0½
B_1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2¾
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_3	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_3	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_3	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2¾
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_3	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_3	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 1½
A_3	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_3	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_3	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

	£	s.	d.
Portland cement, per ton	2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

	£	s.	d.		£	s.	d.
Cart and horse	1	3	0	*Trailer*	0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
IF left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 1 17 6
DO. 6-2-1, per yd. cube 1 12 6
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 14 0
BREEZE CONCRETE, per yd. cube . . 1 7 0
DO. in lintels, etc., per ft. cube . . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Stoneware pipes, tested quality, 4 in., per ft.	0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

	£	s.	d.
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

	£	s.	d.
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

	£	s.	d.
SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

	Med. Grey	*Med. Green*
Portmadoc Ladies	£14 0 0	
Countess	23 0 0	
Duchess	32 10 0	
Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

	£	s.	d.
Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

	£	s.	d.
Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	*Med. Green*
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

	£	s.	d.
Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

	£	s.	d.
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ½ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. *½ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½*d.* to 8*s.* per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

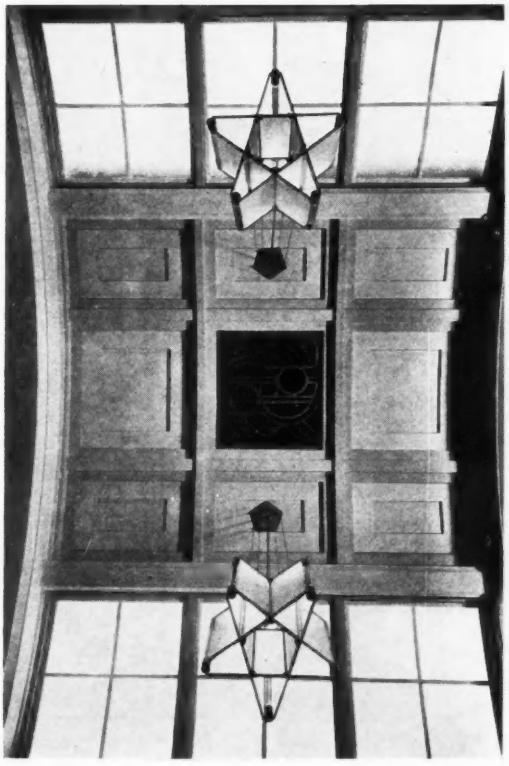
SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster-board, per yd. sup from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. from	0	2	3
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	1/16 in.			⅛ in.			¼ in.			½ in.			¾ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6			
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6			
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1	0½	10	—		
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1	6	—	—		
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1	0	—	—		
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—	—		

NEW LIBRARY AT THE POLYTECHNIC, REGENT STREET, W.1 : BY FREDERIC E. TOWNDROW



THIS library has been planned to hold 25,000 books and to accommodate both lending and reference departments.

For the most part the work formed an internal construction on the site of the old architectural studios on the first floor. In transverse section these were like a semi-octagon, with the top side for the ventilation ducts, the two sloping sides glazed with large sheets of patent glazing, and the vertical sides of brick walling. In reality, the new work is a large semicircular laylight beneath a concrete roof. The coffers are of fibrous plaster, all the projecting members being structural.

The electric light fittings were specially designed by the architect.

The slight golden tone of the joinery, which is Austrian wainscot oak, oiled and waxed, is enhanced by the warmer colours of the cork tile floor and a sparing use of bright yellow in the edges to the coffers. A warm cream is used to pick out the main structural members of the ceiling. The ceiling air-vent panels and the light fittings are lacquered in gold.

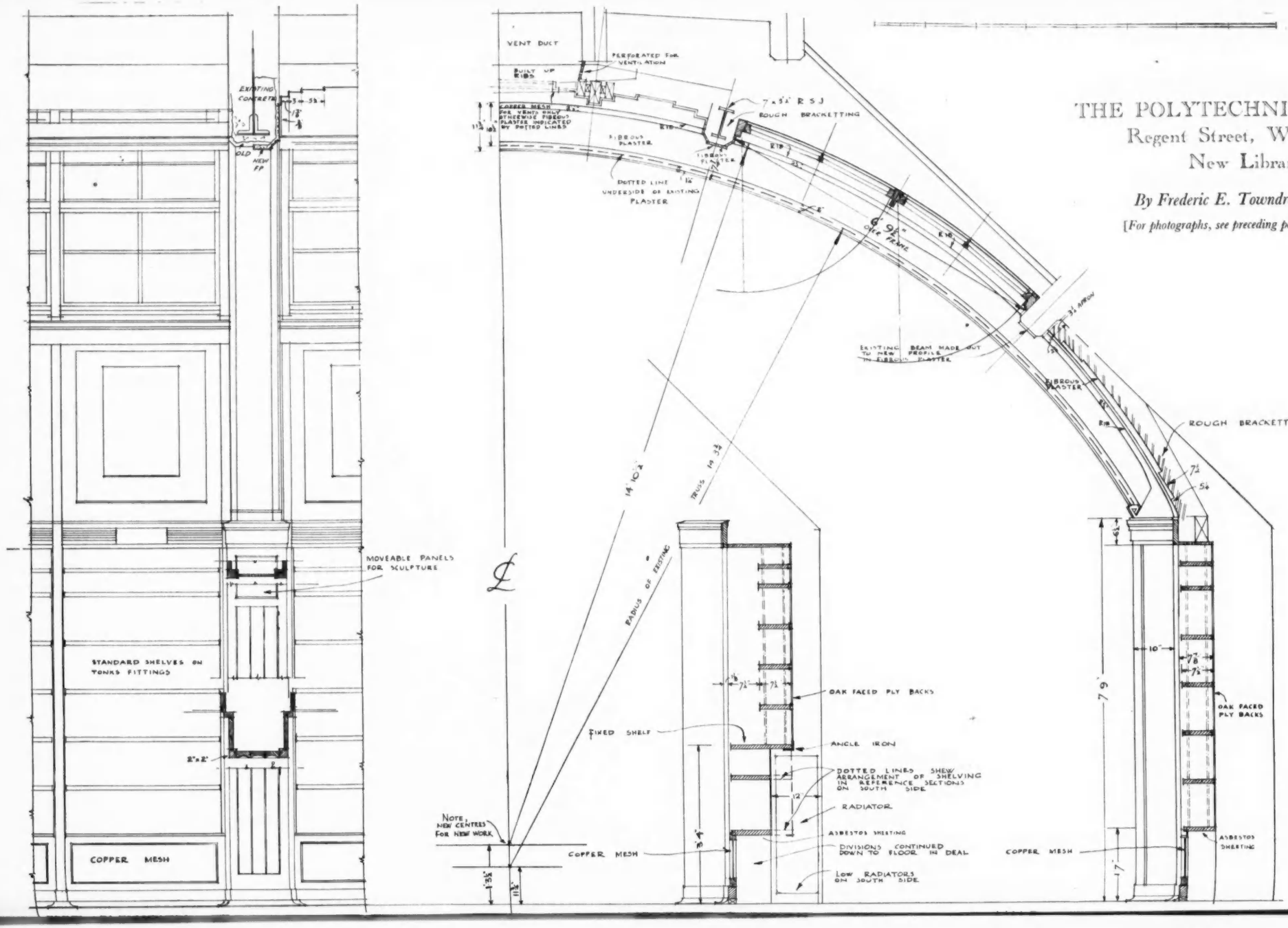


The above photographs, of a section of the ceiling, looking upwards, and a bay of the bookshelves, were specially taken to illustrate the working drawing reproduced on the following page.

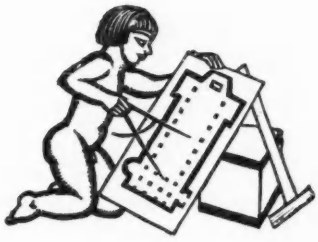
THE POLYTECHNIC, Regent Street, W.: New Library.

By Frederic E. Towndrow.

[*For photographs, see preceding page.*]



THE ARCHITECTS' JOURNAL



WEDNESDAY, MARCH 12, 1930

BUILDING HIGH IN SPITE OF LONDON'S BYLAWS

Today's Exceptions May Become Tomorrow's Rule

IT will have puzzled many people to know why, when the bylaws that govern the height of buildings in the London area expressly define the maximum cornice height of new buildings at 80 feet and the limit of occupied room space at 100 feet, there should appear above the skyline in all parts erections that clearly infringe this law and set standards more consonant with New York than with London.

On the evidence of these buildings anyone might casually assume that the law had been altered or had been allowed to lapse. He may be comforted to know that in every case where a building has exceeded the statutory height a definite exception has been made to an Act which still stands on the statute-book. It could be pointed out that in no case does any one of these buildings obtrude a greater bulk between sunlight and the neighbouring streets and property than would otherwise have been allowed by the normal reading of the Act, and that in no case were any of them put to occupational uses above the 100-foot line. So that it comes to this: for the purposes of architectural distinction, advertising or pure pride, whatever may be included under the liberality of "ornamental towers, turrets or other architectural features" may rise above the common mean in lordly but unoccupied splendour—a costly extravagance, withal.

If one looks backward a few years it is easy to remember a London that, by comparison with the appearance today—an appearance largely due to the operation of the 80-foot limit—was decently low in height, easy to move about in, and pleasant and sunny withal. Thinking of Regent Street as it was and is gives one exactly the extremes of comparison by which one may gauge the effect produced by setting a maximum limit of height far above the then existing mean level of building. One notices how much less sun enters Regent Street than used to in past times, and one finds with horror that the curiously narrow back streets have become impossible gullies at the base of towering walls of steel, brick and glass. One sees, in fact, that the 80-foot limit is one beyond which it would be unwise to build unless considerations of light and air, traffic and communication are to be entirely left out of account.

Looking at this advance of rebuilding without regard to the regulations which have governed its growth, and seeing it as merely the manifestation of economic expansion, one might say that as buildings a few years ago were normally low, and as they have so prodigiously increased over so short a period, nothing should prevent the natural tendency to rise, and that, indeed, the higher they rise the better. In this way do many business men think, wondering that even 100 feet should be a limit. Let us attempt to assess the present state of affairs in its true relationship to the past and the future. Not in the carping spirit of those who would like London to remain a city of domestic squares and country streets, nor yet from the soaring standpoint of him who measures success in stories from the pavement, let us consider now the bearing of these exceptions.

Allowing for the known fact of their being untenanted above the regulation height and of their invoking discretionary rights under the Act, it is still necessary to inquire whether, perhaps, the creation of thirty-eight exceptions in one year is not piling up too unwieldy a mass of precedent. There may come a day when all the towers may put their heads together and refuse to be regarded as exceptions, and one may be sure that there is a section of the business community only too eager to back them up. Again, may one not wonder whether the L.C.C. themselves find 80 feet too low for general tastes? Probably not, but nobody knows.

We do know that London streets are getting higher, and that less light and air are circulating in roadways that are filled with ever-increasing traffic. Would it not be far better for the health of us all if town planning were to solve the difficulty by exercising discretionary powers directly regulated by the incidence of light and air over the whole area of London?



A MODERN MASTERPIECE OF BRICK DESIGN

The Ninth Church of Christ, Scientist, Great Smith Street, Westminster, S.W., designed by Sir Herbert Baker, A.R.A., was officially opened on Sunday last. The accommodation provided includes a big circular assembly hall, a large entrance hall with apsidal ends, and a children's Sunday school. Among the outstanding constructional features are vaults and semi-domes, beautifully executed in brickwork. Even the inscription has been worked in this material.

NEWS & TOPICS



G. D. Gordon Hake, F.R.I.B.A., headmaster of the R.W.A. School of Architecture, Bristol, first recipient of the new R.I.B.A. annual Athens bursary, which is of the value of £100 and requires the bursar to spend four weeks in Greece.

THE SLUM CLEARANCE BILL

THE Labour peer, Lord Marley, introduced the Government's Slum Clearance Bill in a maiden speech to the House of Lords last Wednesday. He made it clear that the new Bill is to differ from any of its predecessors in point of comprehensiveness, making a frontal attack on the problem in its worst manifestations. It regards reconditioning methods as totally inadequate, and will institute a wide and expensive programme of actual rebuilding.

★

Lord Marley warned the House that the Bill would affect the rights of private property, meaning, I suppose, vested and speculatory interests; and that the expense would include the housing of people dispossessed by clearance of unhealthy areas.

★

If all this is made law, the two great bugbears of slum clearance will be on the way to being removed. The class of property owner most affected by slum clearance is not usually one that the public may feel too tender-hearted about, as many who are engaged upon social work fully realize; while town planners, on the other hand, know how much the presence of slums and decaying property may affect the spirit and the earning power of large masses of people and the real wealth of cities. It would be a fine thing for this country if public money could employ men on so fine a job of work as this.

FLOOD LIGHTING IN ST. PAUL'S—AND ELSEWHERE

When the screen, which has for five years hidden part of the interior of St. Paul's Cathedral from public view, is taken away some time in May, no change will be more noticeable than the reorganization of the electric lighting. The high altar, which Wren made the focus of the whole design, will be illuminated by hidden lighting, with what effect of dramatic grandeur one may imagine, when one remembers how beautifully it glows under an occasional beam of sunlight. Nearly as dramatic will be the transformation of the mosaics of the dome, flushed by light hidden above the upper cornice.

★

Light is becoming more and more a necessary factor of architectural design, so that it will soon be impossible to think of a great ceiling without at the same time thinking of light and colour—and one day, perhaps, of fine decoration and fresco. I have not yet been, but I mean to pay a visit, to the Banqueting Hall, now the Royal United Services Museum, in Whitehall, where the ceiling that Rubens painted for Charles I. in 1635 is clearly visible for the first time in three hundred years—through the agency of flood lighting.

WHAT DE-RATING COSTS THE L.C.C.

It appears from the L.C.C. estimates for 1930-31 that the De-rating Act does not seriously affect the budget for the county of London. The actual loss of rates amounted to £2,110,000 for the standard year 1928-29, which is not large when one considers that the L.C.C. has the yearly spending of the incredible sum of forty million pounds of public money. This is more than the income of all but the largest states, and the responsibility it carries with it might well fill with trepidation a body less capable and zealous in the public welfare than the L.C.C. itself.

★

It will be remembered that, while the De-rating Act does not seem to involve great losses, it is represented in the gigantic total by a sum of £11,601,080, occasioned by the transference of the Poor Law services from local authorities to the county, which services bring with them a wages bill amounting to over three million pounds.

A " BROAD ARROW " OF COMMERCE

This photograph of a rustic scene shows rather pointedly at what price, both to the enterprising press and to the defenceless roadsides of west and north countries, new papers have found a footing and a circulation where there was none before. One may well wonder how much the success of these undertakings is dependent upon good journalism of the bright and snappy sort, and how much upon the type of devastating publicity which has taken all savour from this little scene at the cross roads. Do these broad arrows point the way to anything of a new and peculiar value, I wonder?



One of the broad arrows of commerce, signs of the times, indices of " progress," or what not, that should have no place in the landscape of our ideals.

TOWN-PLANNING A DEAD LETTER IN FRANCE

Town-planning in France has become a dead letter. In 1919 the French brought in a most drastic town-planning law which made it compulsory upon the larger towns in France to prepare plans for their future development. But, although town-planners have prepared schemes for Greater Paris, for Rheims and for Dunkerque, none of them is being carried out, and the organization that has been set up for planning the region of Greater Paris moves all too slowly. Whereas in this country only a small staff connected with the Greater London Regional Planning Committee are paid officials, the members being all volunteers representing local authorities, in Paris the committee is composed almost entirely of public officials. M. Agache, the distinguished town-planner, thinks that the tenacious individualism of France has the effect of accentuating the national inaptitude for organization.

SOLVING THE HOUSING PROBLEM IN THE MIDDLE AGES

A unique example of the way in which the housing problem was partly solved in the Middle Ages may be found at St. Mary's Hospital, Chichester. Many visitors to this ancient city go to the cathedral and study the Market Cross, but never see the unique Hospital of St. Mary that is hidden away between St. Martin's Street and the street called Little London. It was probably built at the end of the thirteenth century as a hospital, with a chapel at one end 47 ft. long, and a hall at the other 84 ft. long. The details of the piscina in the hospital are so exactly like those in the neighbouring Church of St. Olive that they were probably made by the same mason. The oak screen appears to be modelled after the same ideas of tracery as the windows of the Cathedral Lady Chapel. But within the hall are sixteen rooms inhabited by eight old ladies—pensioners selected by the Dean and Chapter.

STATICS AND DYNAMICS

How seldom we realize what may be called the dynamic history of things that impress us by their static quality! Few could make a guess, by merely looking at the enormous block of marble that is the Mussolini monolith, at what labours of transit its position signifies. A recent article in the pages of this JOURNAL must, however, have brought them vividly home to readers. And now, here is *The Manchester Guardian*, with its story about the twelve splendid pillars that support the roof of the banking hall in Sir Edwin Lutyens's new Lloyds' Bank in Cornhill. Eight of these are cut from a piece of Italian marble weighing more than 100 tons, which, rolling down a hillside, threatened to destroy a village. In the course of blasting operations in the quarry hundreds of feet above, this prodigious mass took charge, broke away and balanced itself on a jutting crag. Only after twelve days of incessant and precarious work was danger averted. The marble columns, now in position in the new building, took over a year to cut and polish before they were transported to London by special steamer. The main section of each pillar is twenty-six feet long, has a diameter of three feet, and weighs fourteen tons.

POULTRY, E.C., A CENTURY AGO

A print which was exhibited recently at the Midland Bank, Poultry, shows the site of the bank in 1825, including Wren's Church of St. Mildred, Poultry, demolished in 1872. Here, too, had been the poulterers' stalls which gave the street its name. On the right was Scalding Alley, and beside it ran the Walbrook, then large enough to carry barges. Beyond the church was the Poultry Compter, where were imprisoned Dekker the dramatist, and the Smithfield martyr, John Bradford. In 1817 the Compter was destroyed and there was built the Poultry Chapel, which was to become famous under Dr. Parker. In 1872 the bank, which had been adjoining since 1837, extended itself to the Poultry and took in the chapel. The proceeds of the chapel sale went towards building the City Temple. This reproduction and information are due to the courtesy of Mr. H. C. Fisher, of the Midland Bank. ASTRAGAL



Upon the site here pictured as it was a hundred years ago now stands the massive Midland Bank, Poultry, E.C. This Wren Church of St. Mildred was demolished in 1872.

GRAMOPHONE GALLERIES IN NEW OXFORD STREET, W.

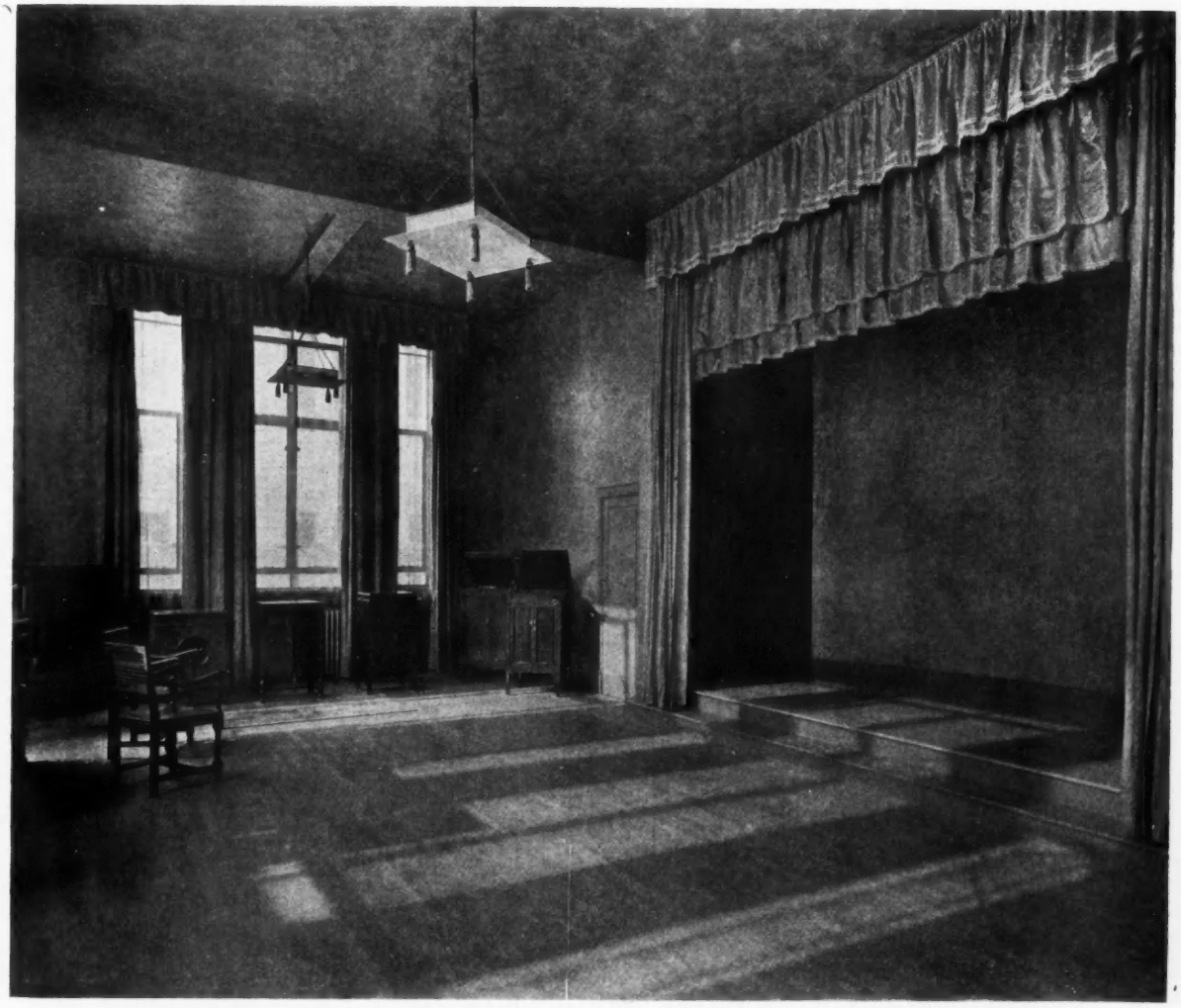
DESIGNED BY ROBERT ATKINSON

MESSRS. ALFRED IMHOF'S new premises, for the selling of gramophones, records and wireless apparatus, occupy the five lower floors of the new building erected at the corner of New Oxford Street and Bainbridge Street, London, W. Surrounding the shop space on the ground floor are sixteen audition rooms on two levels, those on the upper level being approached by a light iron staircase and open gallery. In the basement are further audition rooms and two large showrooms for the exposition of gramophones and wireless instruments.

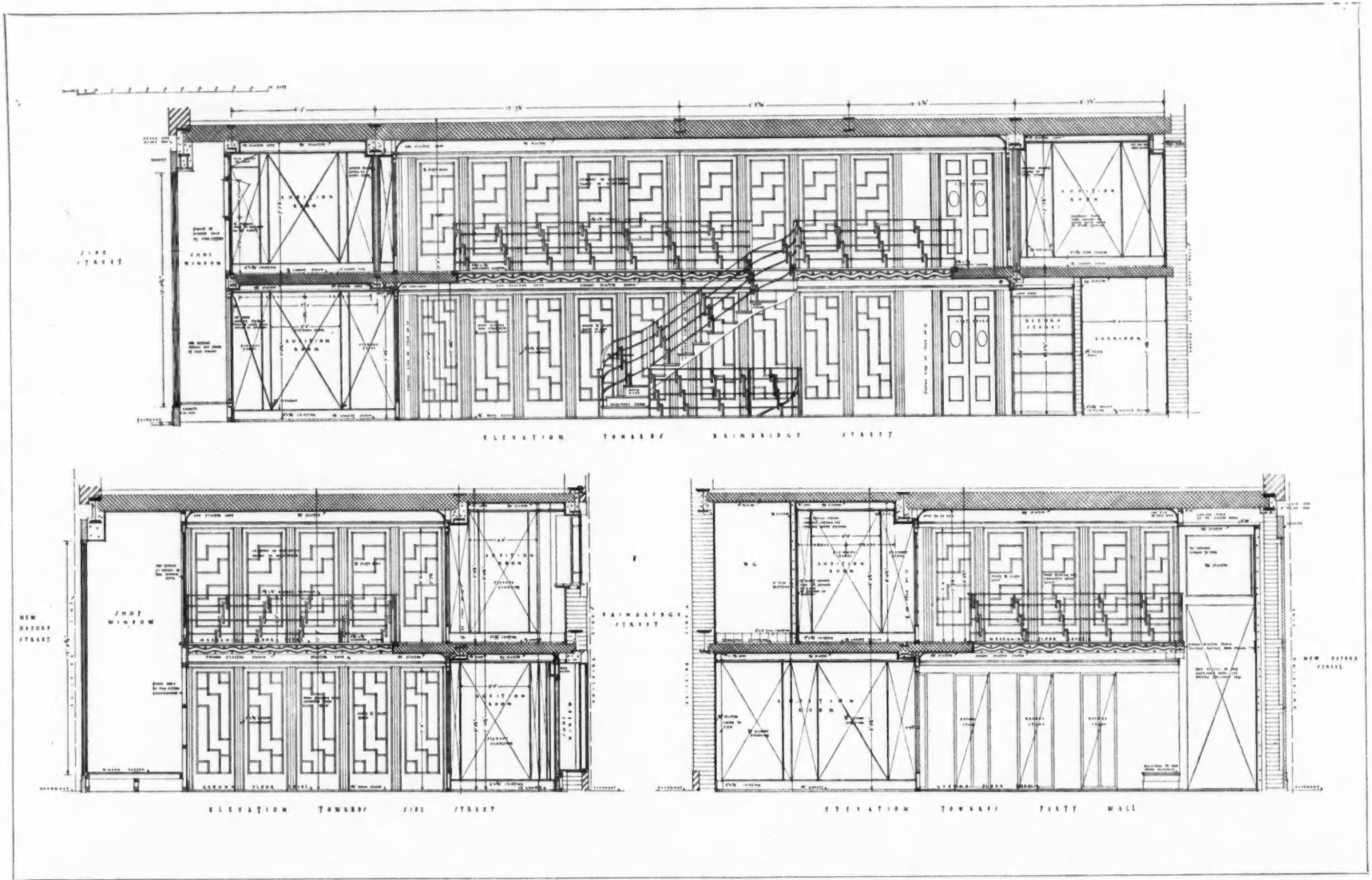
On the first floor there has been provided a large concert room expressly designed for gramophone recitals, with a small stage and special lighting arrangements. On this floor and the second mezzanine are placed the administrative offices, dealing with the large overseas trade carried on by this firm.

In the construction of the audition rooms particular attention was paid to the sound-proofing of walls and floors. The floors are of hollow tiling, and on top of these, in the audition rooms, are very thick carpets and felts. The walls between the audition rooms are built up of four thicknesses of three-ply Cabot's quilting, faced on each side with extra thick five-ply sheeting. The fronts of the audition rooms consist of glazed panels, each formed with one sheet of plate glass, $\frac{3}{8}$-in. thick. The doors are fastened with lever-type handles and are sound-proofed all round the edges with special rubber.

As regards decoration, the ground floor and mezzanine are painted a pale blue-green, picked out with lines of pale gold, the metal work being in dull gilt and the ceiling a dull silver. The audition rooms on the ground floor are painted pale buff, picked out with lines of gilt or a contrasting colour, and, on the mezzanine, an eau-de-nil colour with the panel lines similarly emphasized. The concert hall on the first floor is in green and gold; and the colour scheme in the basement is a pale warm grey, relieved with lines of rose and gilt, while in the showrooms, which are in deep parchment, a scumbled effect has been adopted with relieving lines of gilt. Specially designed lighting fittings are a feature of the decorations.



The concert room on the first floor is expressly designed for gramophone recitals, and is provided with a small stage and special lighting arrangements. It is decorated in green and gold.

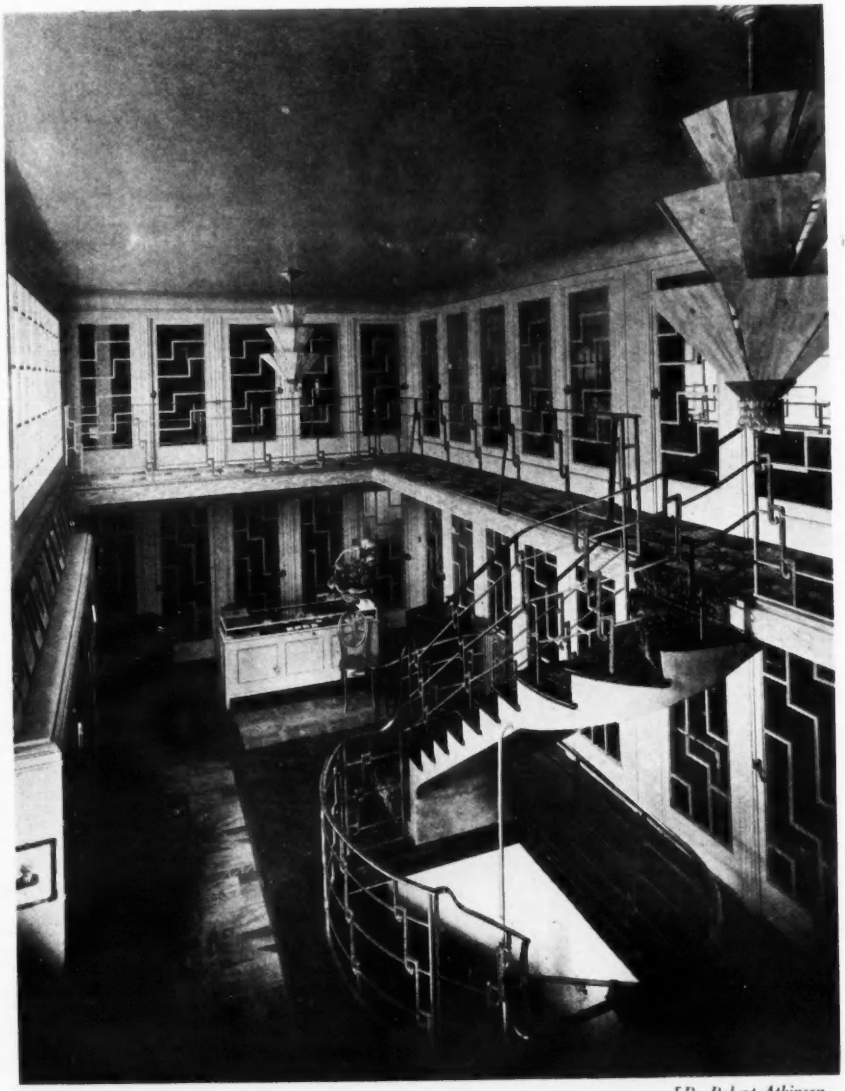


Messrs. Alfred Imhof's premises, W.] *[By Robert Atkins.*

These architect's sectional drawings of the shop should be compared with the plans on page 422. Around the shop and its gallery are sixteen audition rooms, besides gramophone record stands.

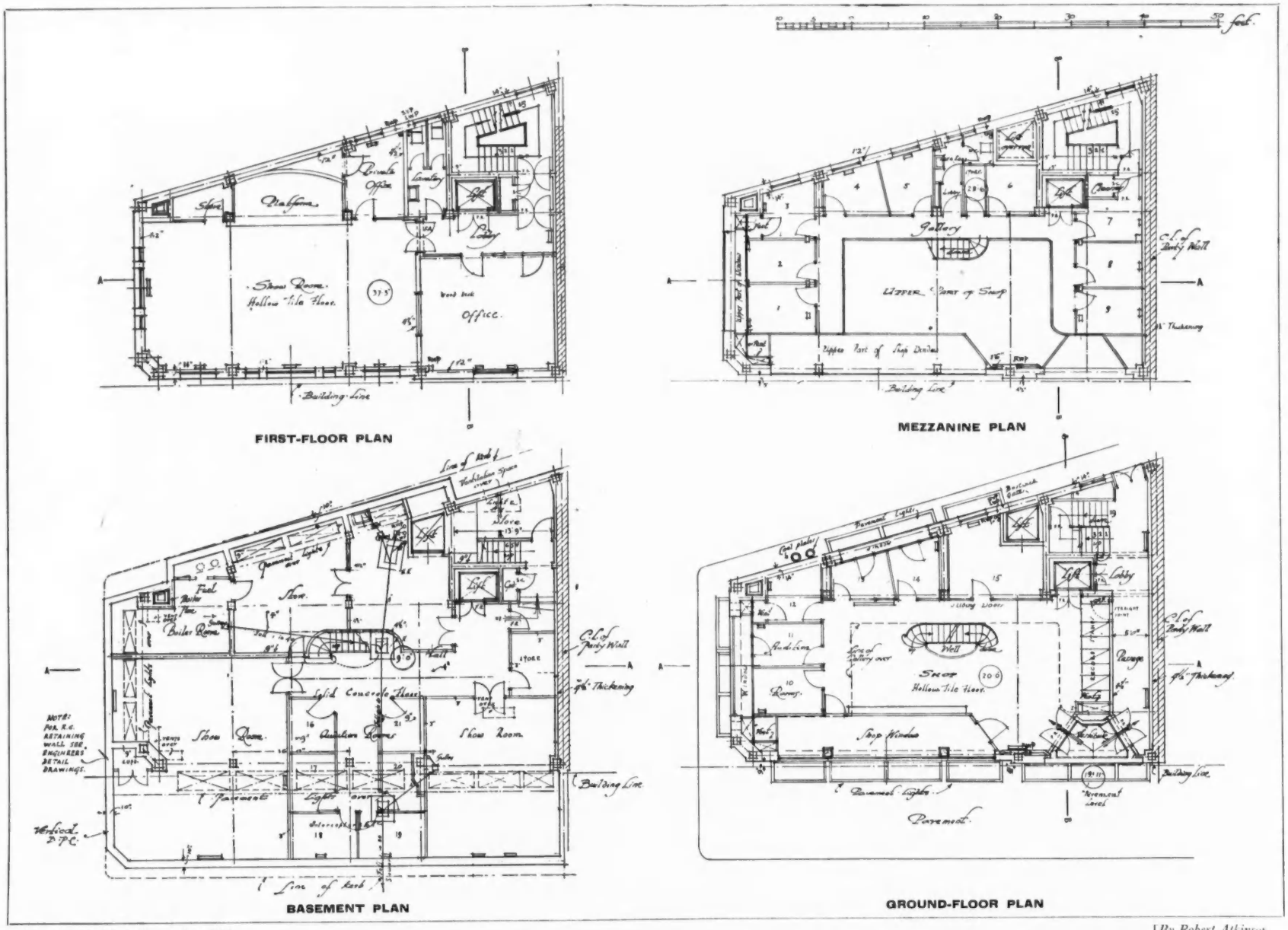
The arrangement of the shop should be compared with the plans on page 422. Around the shop and its gallery are sixteen audition rooms, besides gramophone record stands.





Messrs. Alfred Imhof's premises, W. [*By Robert Atkinson.*

The shop, looking towards the entrance, and from the gallery in the opposite direction. It is painted pale blue-green, picked out with lines of pale gold. Metalwork is dull gilt and the ceiling dull silver.



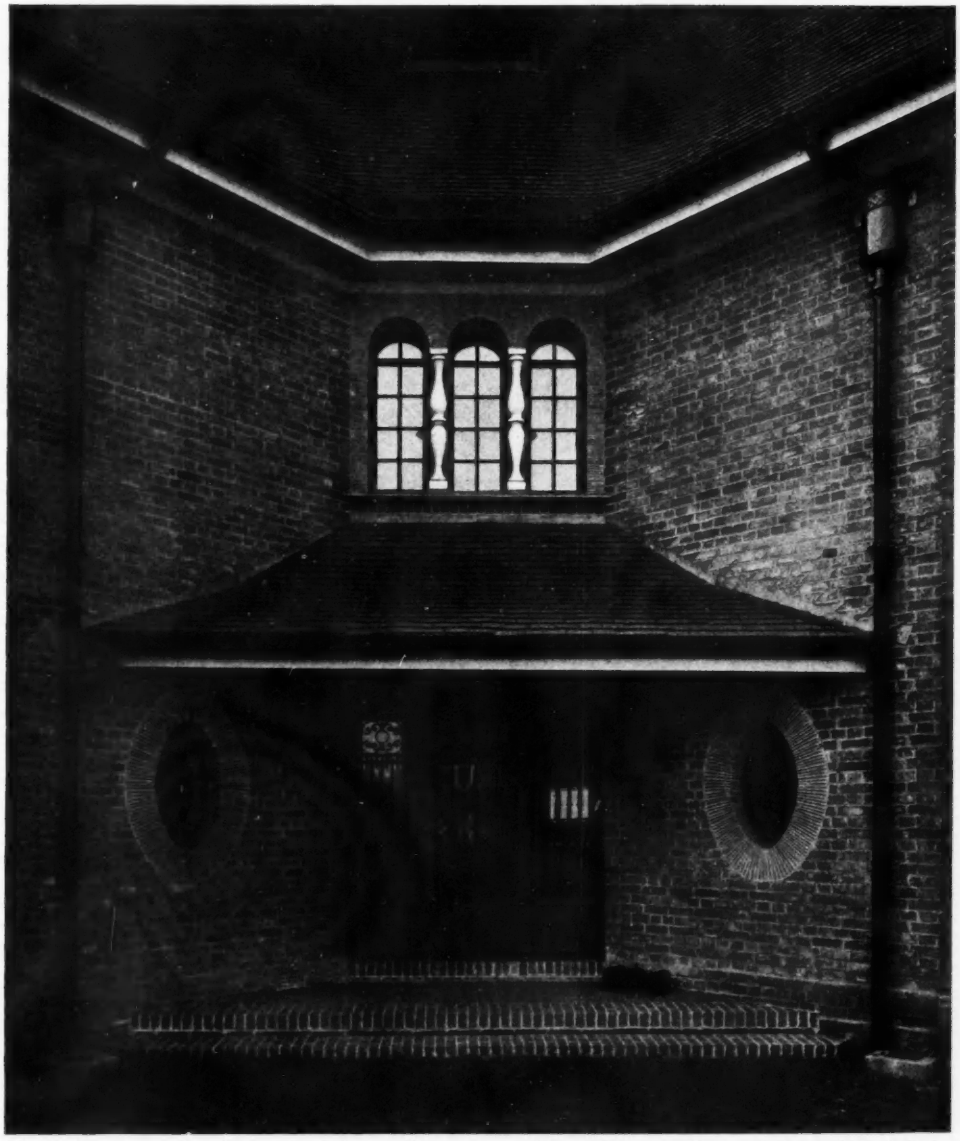
Messrs. Alfred Imhof's premises, W.] [*By Robert Atkinson.*

Plans of four of the floors. In the basement are further audition rooms and two large showrooms for the exposition of gramophones and wireless instruments. On the first floor is the concert room, with its platform, for gramophone recitals; here, too, and on the second mezzanine, are the administrative offices.

PLANNED AS A HALF-HEXAGON

An Interesting House, with Two Loggias, at Surbiton

DESIGNED BY JOSEPH HILL



The main entrance has door and window grilles in wrought metal to a pilaster design, which finds its echo in the cast stone treatment of the window above that lights the spacious first-floor landing. The rain-water heads find a definite place in the design, here as elsewhere.

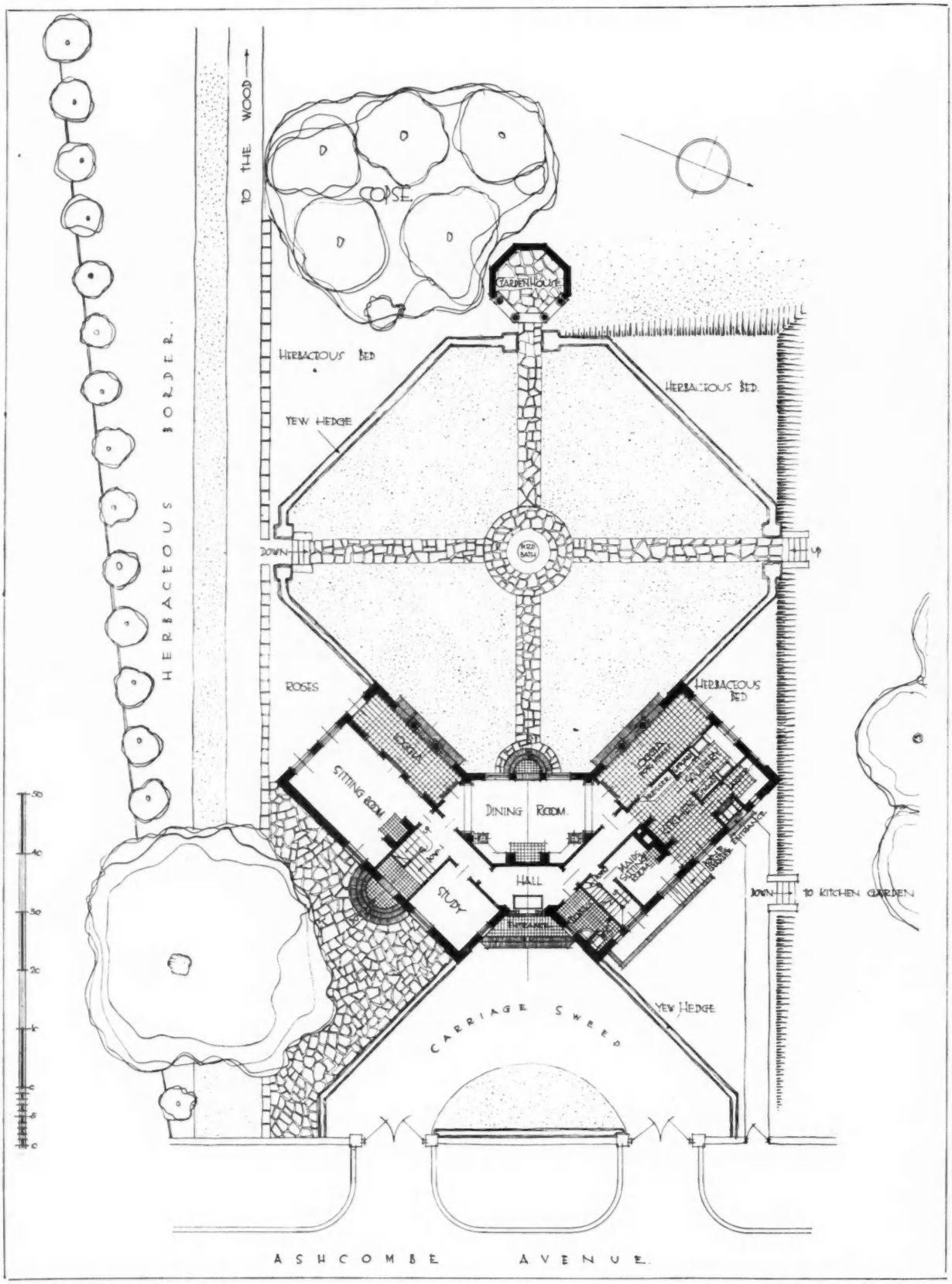
THE COPSE HOUSE has been designed with special reference to and erected upon what is probably the most commanding site in Surbiton, from which beautiful views may be obtained in every direction, particularly to the north-west, where an extensive portion of the Thames valley and many miles of the country beyond may be seen. In order to take advantage of these views and to overcome certain difficulties in levels, the architect resorted to a half-hexagonal layout, which has led to some very interesting planning, and has resulted in practically every room trapping the sunlight during the course of the day.

The general external treatment strikes a Georgian note, with a happy combination of brickwork in two colours and a good roof of hand-made red tiles. Important features are the two loggias on the garden front. The one facing south is especially designed to be used for taking meals and is fitted with collapsible glazed doors and with serving hatches from the kitchen and to the scullery, both of which are planned immediately behind it.

The entrance doorway, placed symmetrically between the splayed walls, has doors enriched with a pilaster treatment in wrought metal.

The architect has planned the layout of the garden and specified the nature of the trees and shrubs that have now been planted; thus comity of design has for once been realized.

Plans of four of the floors. In the basement are further audition rooms and two large showrooms for the exposition of gramophones and wireless instruments. On the first floor is the concert room, with its platform, for gramophone recitals: here, too, and on the second mezzanine, are the administrative offices. [By Robert Atkinson. Messrs. Alfred Imhof's premises, W.]

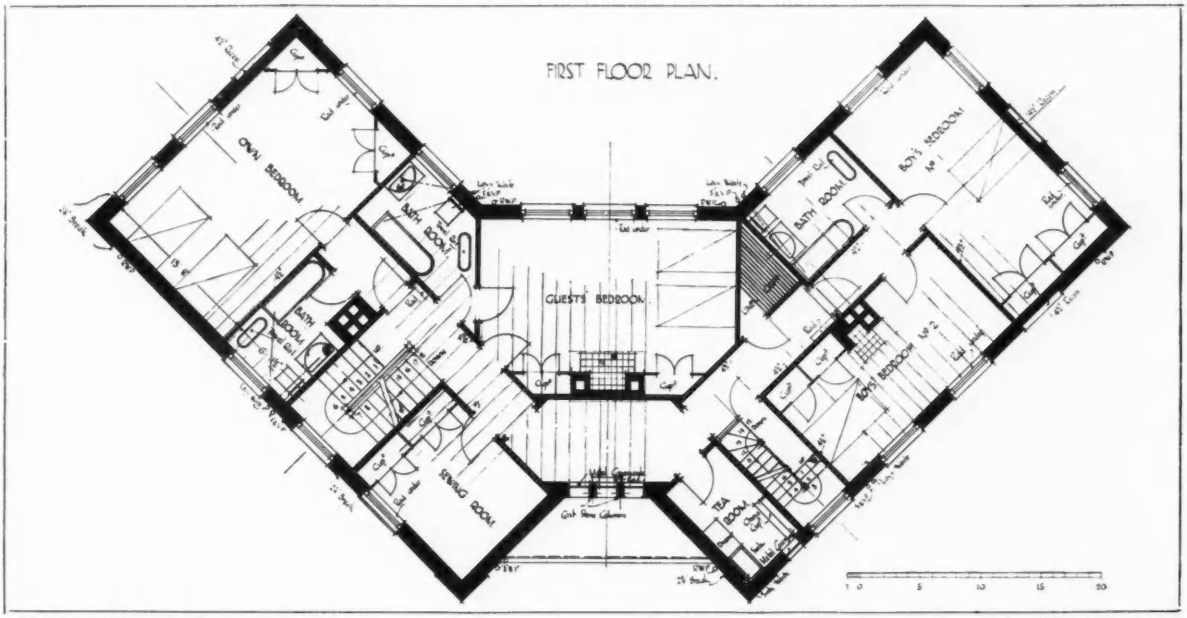


The Copse House, Surbiton, Surrey.] [*Designed by Joseph Hill.*

The ground-floor, and the layout of the garden, which was also planned by the architect, within a site measuring some 180 by 300 feet. One result of the half-hexagon planning is that both the front entrance and the door to the garden come between walls splayed at angles of 45 degrees. The loggia with a southerly aspect is backed by the kitchen connected to it with hatchways.

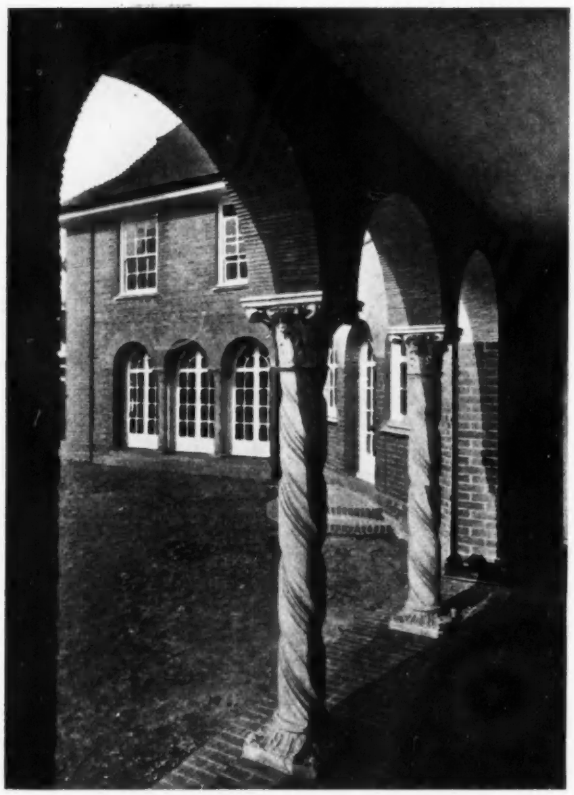


The back, or garden, elevation. The loggia on the left is the one intended for meals, and is fitted with storm-doors that can be folded right back in fine weather. The spirally-fluted columns are in cast stone, the walls in red brick, and the roof is tiled with sand-faced reds. Wood windows of the sliding-sash type are the prevailing rule.



The Copse House, Surbiton, Surrey.] [*Designed by Joseph Hill.*

The architect's drawing of the first floor. A study of the orientation (see plan on preceding page) will show that every room in the house receives full measure of direct sunshine. The V-shaped corridor and landing is a distinctive feature, and the provision of an upstairs tea-room is another. Both the principal bedrooms have their own bathrooms, and there is a third.



Looking across from within the open loggia to the closed one.



This side entrance gives on to what is now a stone garden.



The Copse House, Surbiton, Surrey. [*Designed by Joseph Hill.*

Another view of the meal loggia, fully furnished with sideboard, table, etc., showing doors folded back to admit air and sunshine.



ENGLISH PRECEDENT No. 106

BARN AT ABLINGTON, GLOUCESTERSHIRE

The architecture of barns is by nature monumental. The largeness of scale demanded by storage, and the simplicity of the whole programme that asks for great spans, few windows, entrances wide and high enough for laden wagons, and, in all, material solidity and permanence, produce of themselves the unified conception without which monumental architecture cannot exist.

Built thus to fulfil simply one of the fundamental needs of mankind, a barn is expressive of the very truest qualities of architecture. It has firmness, commodity and, in the finest sense of the word, delight.

—[E. MAXWELL FRY.]

PALACE OF VARIETY AT NEW CROSS



The frontage to Old Kent Road, approximately 200 ft. in length, is carried out in brick, with stone dressings. The publicity sign boards were allowed for in the design; and this view shows their appearance last week.

The Astoria Cinema Theatre, Old Kent Road, S.E.

DESIGNED BY E. A. STONE

THIS latest of London's picture theatres, known as the Old Kent Road Astoria, is within two hundred yards of the canal bridge in Old Kent Road, to which it has a frontage of 200 feet, and was opened last month.

Upon a portion of the site, of about 28,000 square feet, there formerly stood a cinema, which had to be demolished to make room for the new Astoria. As is not seldom the case, considerable difficulties were experienced in planning the theatre with respect for the rights of adjoining owners. Application had to be made for a new building-line, which necessitated the surrender of 2,200 square feet to the local authorities, and an exit passage had to be provided, which further curtailed the site by 2,100 square feet. When all necessary adjustments had been made, it was found possible to plan a theatre with a seating accommodation of nearly 2,500, with a full stage and stage dressing rooms, and with spacious entrance halls, waiting halls and tea rooms.

Placed at the corner of Old Kent Road and Sandgate Street, the main entrance gives access, through a hall, to the auditorium, the balcony, foyer, and the waiting hall at the rear of the stalls, where patrons can queue up and wait under cover, as has now become the usual practice. A study of the plan will show how the capacity of the site has been exploited to obtain economic construction, the maximum of comfort in seating accommodation, and effective sight lines.

The external treatment is simple, relying as it does on masses of plain brickwork in varying planes and heights, relieved by stone dressings. Consideration has been given to the accommodation of publicity signs as permanent features of the façade, and so far as possible these have been incorporated in the design.

The building is a steel-framed, fire-resisting structure that can be roughly divided into three portions: auditorium and entrance hall foyer, stage, and projection room. One might almost say there is nothing in the structure which can burn. A fireproof curtain cuts the stage off from the auditorium, the galleries are of concrete, the grid is of steel, and all doors are of hardwood.

The entrance hall is rectangular in plan, with pay boxes on either hand, and a central staircase leading up to the balcony; and its decorative treatment is essentially simple.

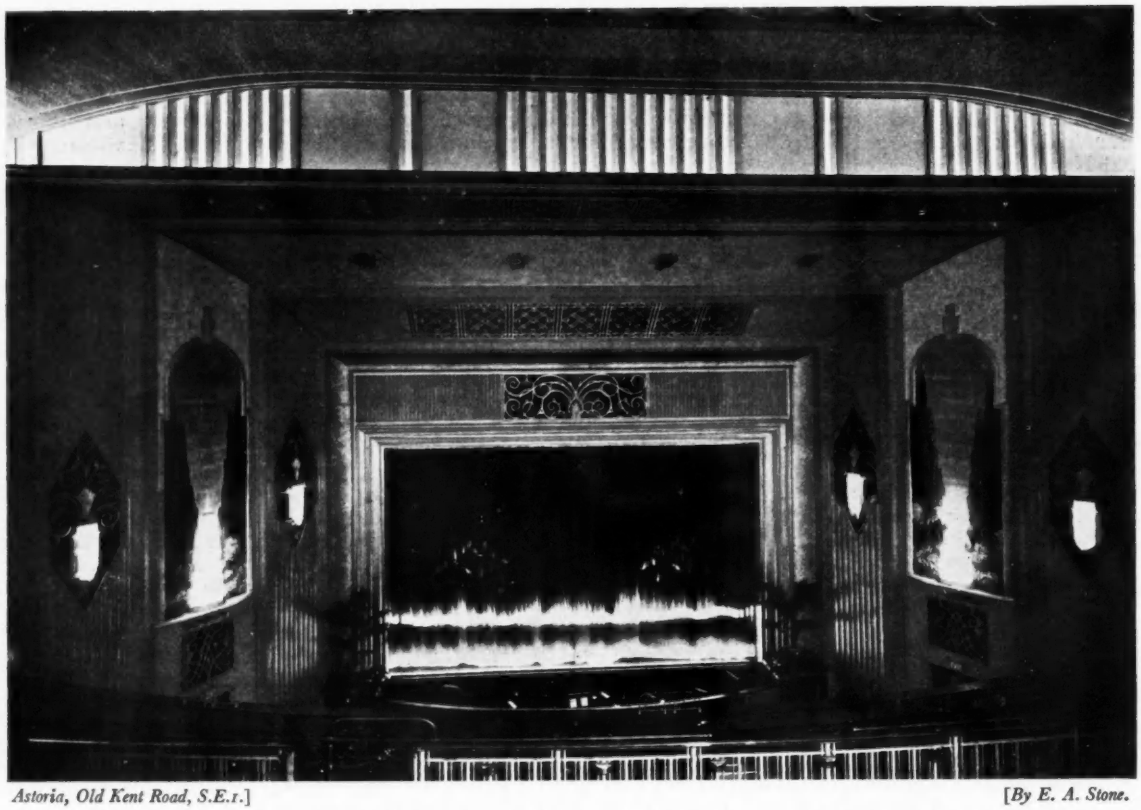
The auditorium gives an impression of spaciousness, and is in a modern style, without being too daring. The varying slopes to floor and ceiling are well proportioned and relieved in fibrous plaster. The wall surfaces have been treated with plastic paint, which has given some very interesting textures, worked up into attractive colour schemes. The lighting fittings have been specially designed, and fulfil very successfully their dual purpose of giving light and of harmonizing with the general decorative scheme that runs through the seat coverings, carpets and curtains.

The house has brick walls, with concrete floor and balcony, and the plaster work is suspended from metal fixings and lathing in accordance with the latest requirements of the authorities, which stipulate that no wood bracketing or fixings shall be used.

The stage is a fine one, being 90 feet wide by 35 feet deep. It is fully equipped with grid, counterweighting, fly galleries, lighting galleries, and a three-colour lighting system which enables any type of stage production to be efficiently presented. Ample dressing and chorus rooms, band rooms, etc., have been built in positions convenient to the stage, and every modern device has been adopted to make the working behind the scenes as smooth as possible. Simplicity and directness of



The axes of the entrance hall, here seen, planned with pay-boxes to either side of its rectangular area, and of the auditorium are at right angles. To the right of the stairs, which lead up to the balcony, is seen the door from the waiting hall, where patrons queue up under cover. The ceiling is in gold, and the walls are pale rose, picked out in black.



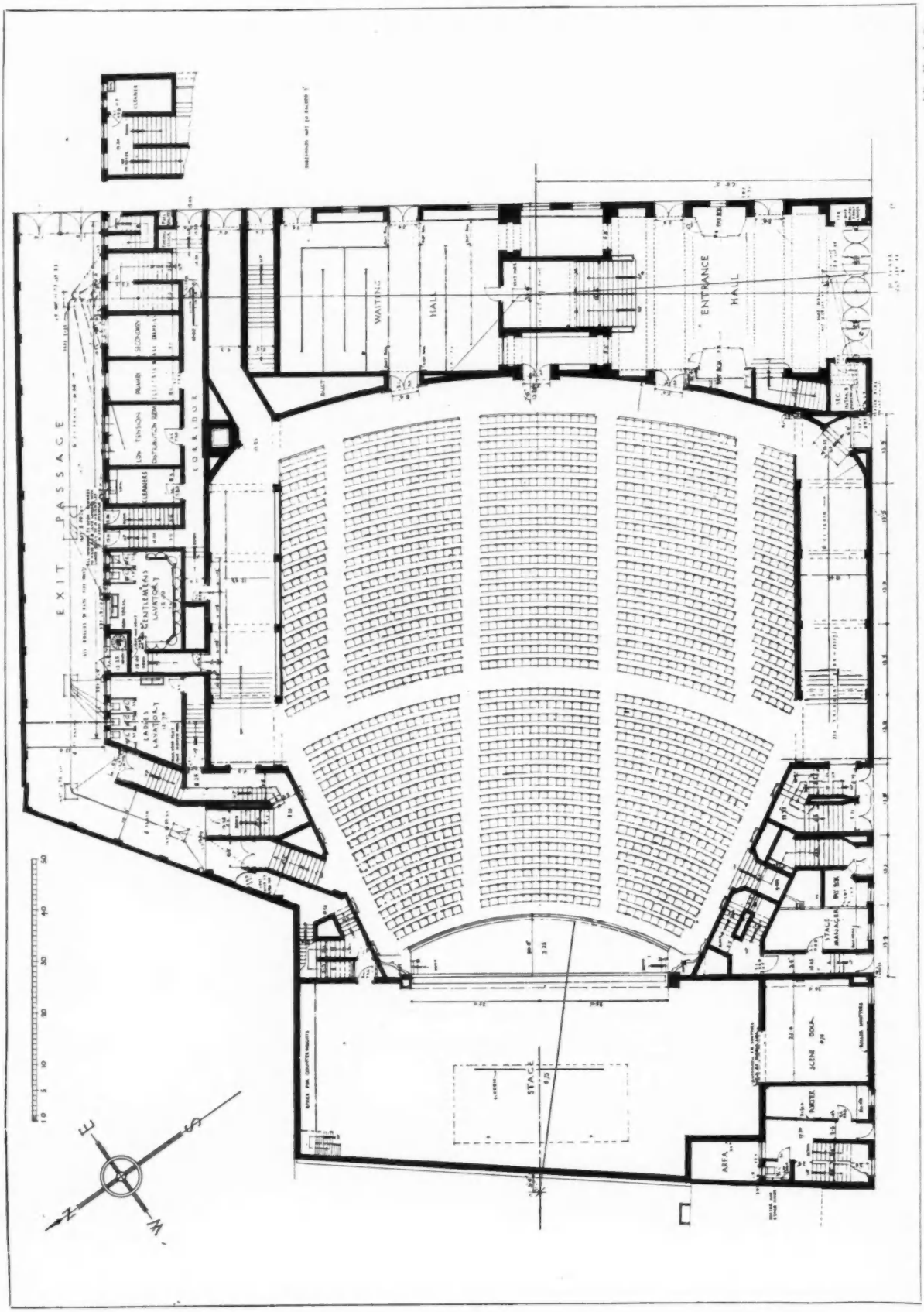
Astoria, Old Kent Road, S.E.1. [*By E. A. Stone.*

Looking down towards the proscenium and stage from the balcony. The stage is conveniently arranged for the production of stage shows of all descriptions. The organ is placed in the void of the roof and the sound is conducted to the auditorium through grilles above the proscenium. Lighting fittings have been specially designed. The delicate blue curtain is in a silver surround.



Astoria, Old Kent Road, S.E.1.] [*By E. A. Stone.*

A side view of the house, taken from one end of the balcony. The curve of the roof down towards the proscenium is continuous and, to all intents and purposes, uninterrupted. The rake of the floor is also perceptible. Both are significant of the attention given today by designers to problems of sight and sound. The scheme of decoration has some modern elements, but breaks away from the "atmospheric" idea lately in vogue, being graduated in tone, upwards, from dull gold to brown, with a silver ceiling.



Astoria, Old Kent Road, S.E.1.

The architect's drawing of the ground floor plan. The theatre seats 2,500 persons in all; over 1,700 on the main floor. It will be observed that in the waiting hall a series of barriers are arranged, serpentine-fashion, to induce waiting patrons to queue up: certain sections of these are removable to facilitate the rapid emptying of the house after the performance. The stage facilities are particularly complete and spac[illegible] art include a suite of drawing rooms, not shown on this plan, conveniently arranged.

[By E. A. Stone.



Astoria, Old Kent Road, S.E.1.] [*By E. A. Stone.*

A general view of the auditorium, from the stage. The array of projection ports, from which there is a throw of 120 feet to the screen, indicates the comprehensive nature of the equipment for the exhibition of every type of film, silent and "talkie," as well as for "stills," and spot-lights in connection with stage plays.

action have, indeed, influenced the planning not only of the stage but of the whole of the building. All the mechanism for stage operations is controlled from the prompt side, and the lighting for all parts of the house has been connected with the main switchboard at this spot.

The projection booth, placed over the balcony at the back of the auditorium, has been built completely outside the main building. The equipment includes 120-foot projectors for silent and talking films, spot arcs and effects machines, besides a workshop and rewinding room. This booth is fire-resisting in every detail, with its concrete floors and ceiling, hardwood doors, and fire-resisting glass, and is, further, cut off from the auditorium by steel shutters which are automatically released by fusible links should fire occur.

An interesting feature is the organ, which in this theatre has been placed in the roof void. It is contained in two fire-resisting chambers, from which a duct conveys the sound into the auditorium through a grille over the proscenium arch. A unique detail is presented by the two consoles, one on the stage and the other in the orchestra well, electrically connected to the organ, so that either or both can be played. The instrument was specially designed and built for the theatre.

The heating and ventilation installation is one of the largest yet incorporated in any theatre. Air is drawn into the building and, before being distributed, is washed and warmed, so as to provide not only a healthy atmosphere, but to maintain a comfortable temperature under all conditions.

All parts of the house are connected by an elaborate system of signals and telephones, and all exit doors are fitted with signal apparatus which indicates in the main office if any door is left open.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

THE adjourned debate on the Bishop of Southwark's motion on slum clearance was resumed in the House of Lords last week.

Lord Parmoor, who replied for the Government, said it was their intention to introduce a Slum Clearance Bill this Session and to pass it into law. They would, no doubt, have the advantage of the researches made and the facts ascertained by the late Government. The question could not be solved without the rural districts being considered as well as the slums of the towns and industrial areas, and the Bill would deal with both. He did not think that this great problem would be approached except on the basis of a large measure of State interference, though, of course, the voluntary societies, which introduced the human element, ought to be encouraged in every possible way. So far as reconditioning was concerned, there would be nothing in the Bill to discourage it, but it would not be one of the main features or proposals in the Bill itself. The Government considered that, although it might be costly, the work of providing alternative dwellings while

slum clearance schemes were being carried out were absolutely necessary, and they intended to press on as quickly as possible with such schemes. They also contemplated that local authorities should undertake in advance larger amounts of new building, which would put them in a position to deal effectively with bad conditions.

The Bishop of Southwark welcomed the reply and withdrew his motion.

At question time in the House of Commons Sir Lambert Ward asked the First Commissioner of Works if he would state what was the arrangement by which a representative of his department travelled abroad to visit buildings occupied by British representatives and officials in overseas countries.

Mr. Lansbury replied that the arrangements by which officers of his department visited public buildings overseas were designed to ensure that, as a general rule, all such buildings were inspected by an architect not less than once in seven years, the frequency of the visits being determined by the importance of the buildings; the larger continental embassies being inspected annually, legations so far as possible every two years, and consulates at less frequent intervals. Since June 1, inspections had been made by architects at Riga, Berne, Budapest, Prague, Vienna, Rome and Paris, at a cost of £138, Washington and Ottawa (£230), and a further visit to Paris and Rome at a cost of £60. Officers were at present visiting Moscow and Berlin, the cost being estimated at £70 or £80, and also various posts in South, Central and West Africa, at an estimated cost of £400. It was proposed to make visits during the next financial year to the Hague, Brussels, Prague, Rome, Vienna, Riga, Washington, Lisbon, Madrid and certain posts in North Africa. In addition to visits made by architects, visits were occasionally made by engineers in connection with the heating and lighting installations, and by technical officers in connection with refurnishing schemes. An officer of the Supplies Division was about to make a tour of inspection to China and Japan in connection with the furnishing of the new Tokio Embassy, and the supply of furniture to various consulates, and also to investigate various matters connected with supplies services generally in the Far East.

Mr. Greenwood informed Mr. Simon that the average superficial area of A-type non-parlour houses included in contracts let by or in direct labour schemes of local authorities in England and Wales during the year 1929 was 766 square feet.

Mr. Thorne asked the Minister of Health, seeing that, on April 27, 1923, his department appointed a committee to survey the prices of building materials and that two members of the employers' side of the Clay Industries I.I.R.C. were represented on the committee, if he could state the reasons why the workers' side of the I.I.R.C. were refused representation.

Miss Susan Lawrence, who replied, said that the two members of the Prices Survey Committee referred to were not appointed as representing manufacturers engaged in the clay industries only, but as representative of manufacturers of building materials generally. At the Minister's request, Mr. Longbottom had recently agreed to serve as an additional representative of labour on the committee.

The Minister was satisfied that the workers would be adequately represented and that any further appointment to the committee, which now had a membership of seventeen, would be undesirable.

Lieutenant-Commander Kenworthy asked the Minister of Health whether, in order to assist local authorities and to lessen the holding-up of slum clearance and town planning and improvement schemes, he would circulate the terms of the proposed Slum Clearance Bill for their information; and whether the general form of the Bill, including the financial provisions, was now settled.

Mr. Greenwood said he did not think that the suggestion was a practicable one. He hoped to be able to introduce the Bill at an early date.

Miss Bondfield informed Sir Kingsley Wood that at January 27, 1930, there were 149,403 insured persons classified as belonging to the building industry recorded as unemployed in Great Britain, as compared with 159,219 at January 21, 1929.



THE Unitarian Chapel, Churchgate Street, Bury St. Edmunds, measured drawings of which are reproduced on the following two pages. The predominant features of this building, a fine example of brickwork, are the two side windows, the oval opening and the circular sundial above it shown in this illustration. The treatment of the two large semicircular headed windows is similar to that of those on the north and west elevations. The window above the entrance doorway has an oval-shaped brick surround, with enriched voussoirs.

LAW REPORT

WATER SUPPLY TO CARAVANS

Laycock v. *Kirkland. King's Bench Division. Before the Lord Chief Justice and Justices Swift and Branson.*

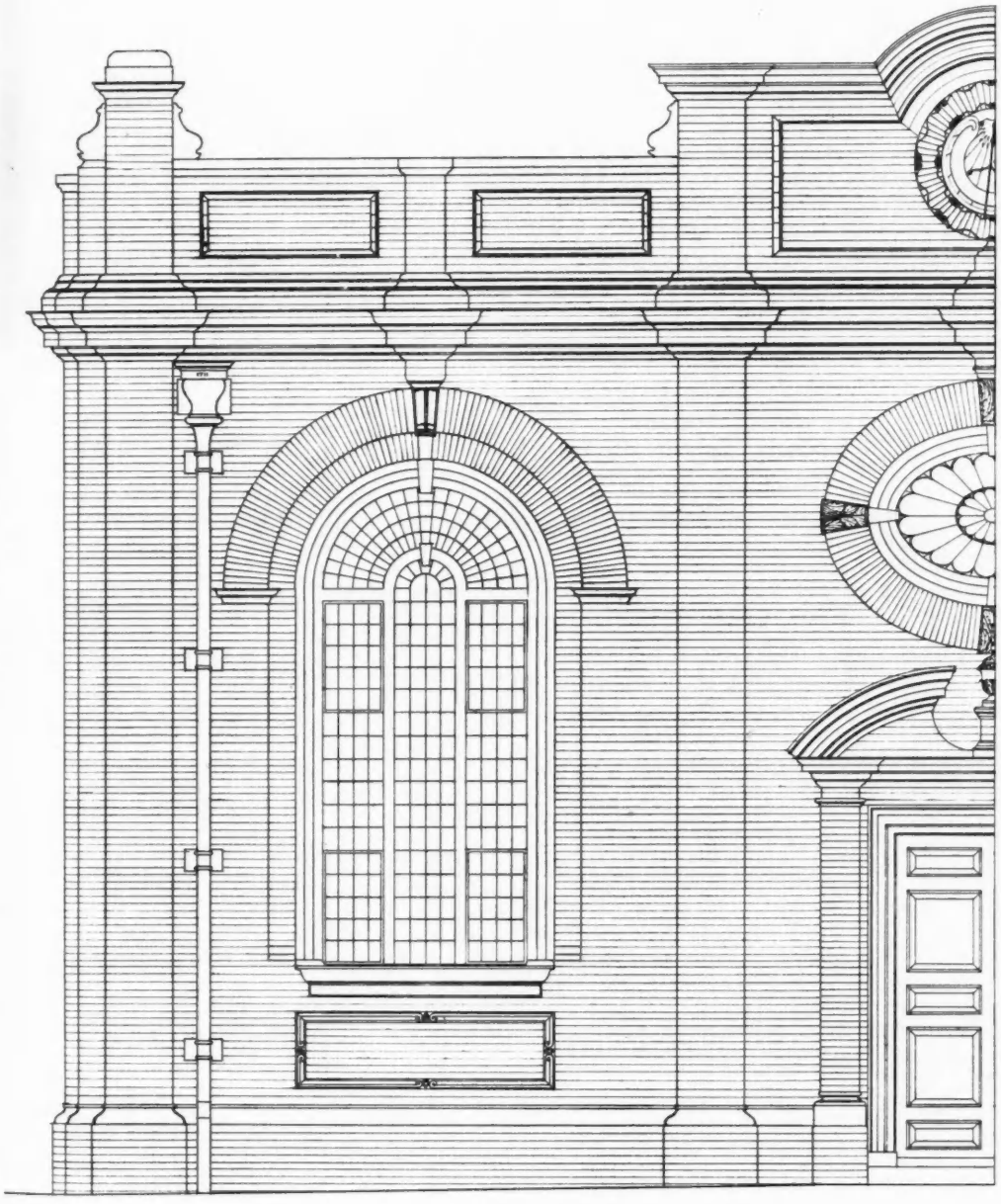
THE point in this appeal by Mr. Laycock, the sanitary inspector of the Belper Rural District Council, was whether the defendant, Mr. Samuel Kirkland, of Markeston, had been guilty of an offence against the Council's bylaws by allowing a caravaner to occupy his land without provision for a proper water supply.

The Council's bylaw stipulated that the owner of land who permitted a caravaner or tent-dweller to occupy it, must provide for that person and his family a supply "of wholesome water on the land." The person in the caravan was on the land with Mr. Kirkland's permission, and he had to walk to a well, nearly a hundred yards away and on another piece of land, for his water. The Council said this was a contravention of their bylaw. When the matter came before the Derby County Justices they refused to convict.

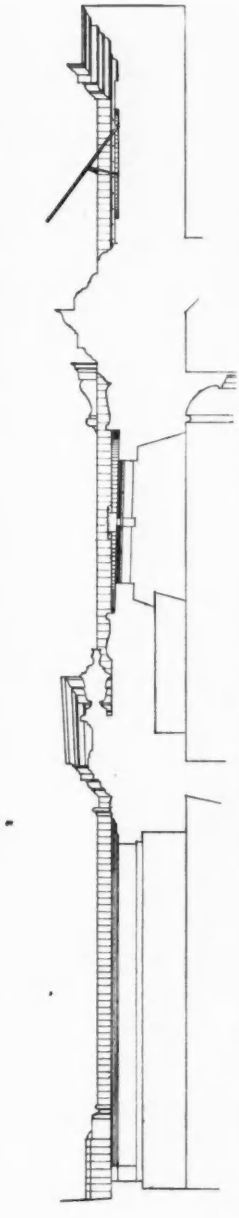
The Council now appealed against the decision, submitting that the Justices had dealt with extraneous matters, and had paid no attention to the bylaw. It was further contended that the Justices had wrongly held that the respondent had created no offence.

The Court allowed the appeal with costs and remitted the case to the Justices to convict the respondent of the offence.

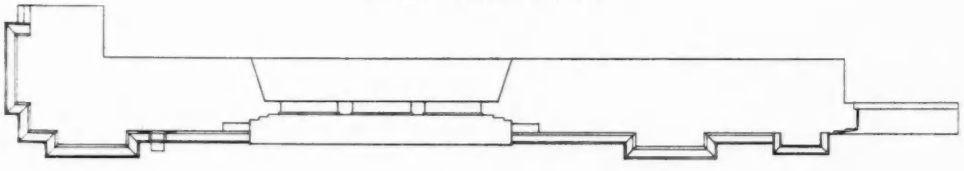
THE UNITARIAN CHAPEL BURY ST EDMUND'S



HALF ELEVATION



SECTION

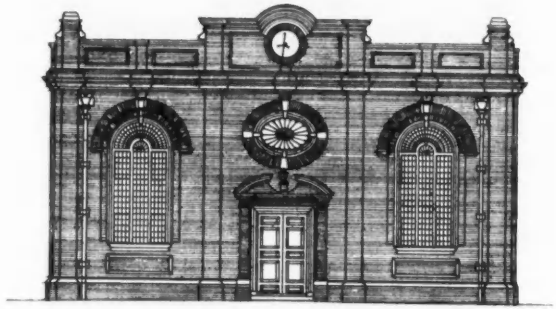


HALF PLAN

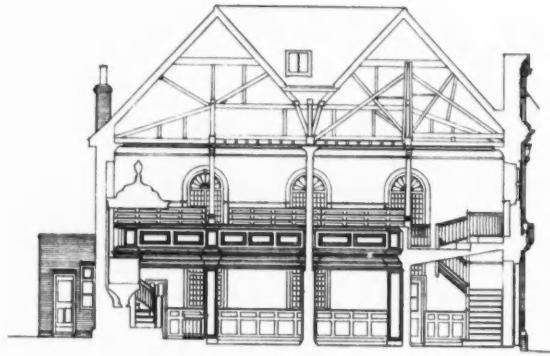
MEASURED AND DRAWN BY
F JOHNSON

SCALE OF FEET

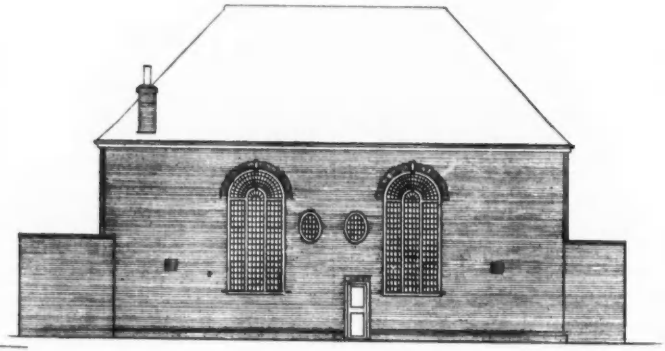
THE UNITARIAN CHAPEL BURY ST EDMUNDS



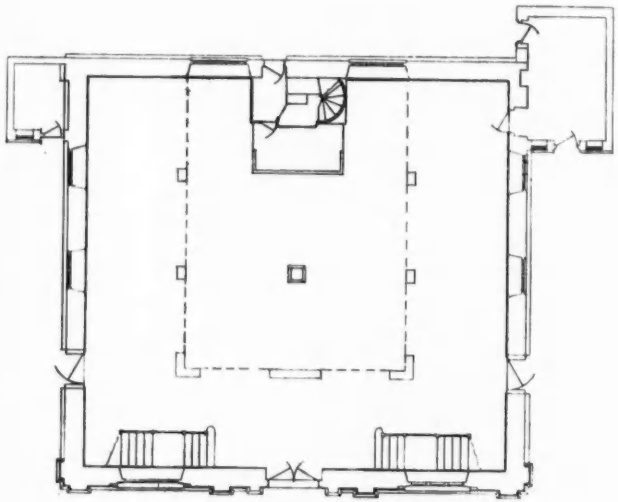
SOUTH ELEVATION



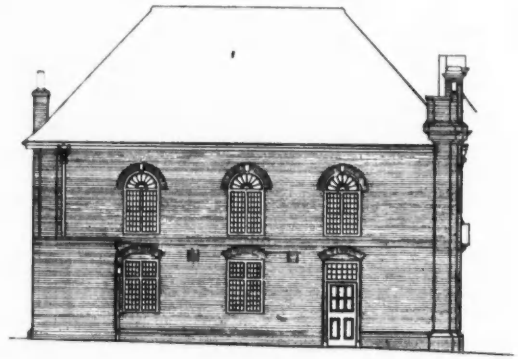
SECTION



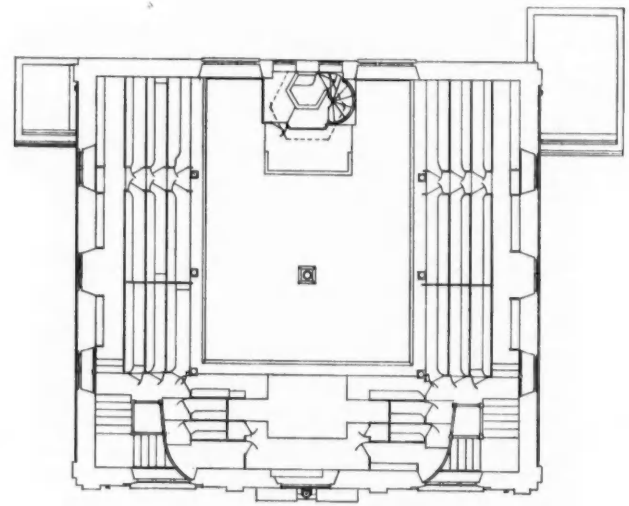
NORTH ELEVATION



GROUND FLOOR PLAN



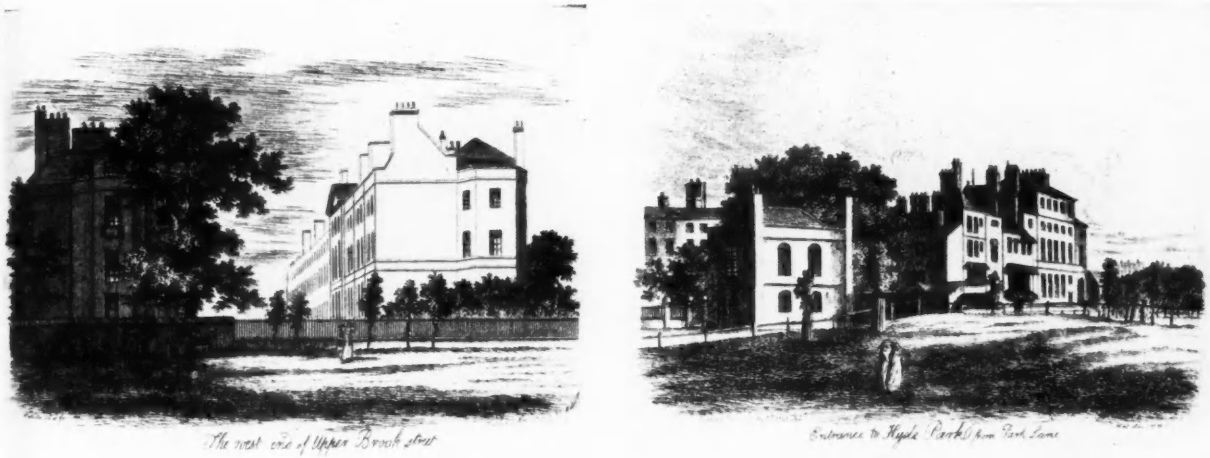
WEST ELEVATION



GALLERY PLAN

SCALE FEET

MEASURED AND DRAWN BY
F JOHNSON



[*From* The Architectural Review.

Two reproductions from old engravings: the west end of Upper Brook Street and the entrance to Hyde Park from Park Lane.

THE MANOR OF EIA

IN an article in the current issue of *The Architectural Review*, Mr. E. Beresford Chancellor describes the Grosvenor Estate as it was in the past. He writes:

It was through his marriage, in 1676, with Miss Mary Davies that Sir Thomas Grosvenor became possessed of that large, irregular tract of ground in the West End of London, once known as the Manor of Eia, and from the Conquest till the dissolution of the monasteries appertaining to the Abbey of Westminster. Today this is known as the Grosvenor Estate of the Duke of Westminster, covering a large portion of ground north of what is called generically Mayfair, Belgravia, and Pimlico.

As one wanders about all this part, the most aristocratic of residential London, what strikes one chiefly is, I think, the *character* attaching to the houses. Here you will find a collocation of Early Georgian architecture, unrivalled elsewhere in the West End. There is a specific hall-mark about the matured red brick, the decorative stone facings, the very shapes of doorways and windows. The cool, marbled halls seem still to resound with the subdued



[*From* The Architectural Review.

The entrance to London at Tyburn Turnpike. On the right is approximately the site now occupied by the Marble Arch; on the left is the beginning of Edgware Road. From a coloured engraving by T. H. Shepherd.

hum of a past day, or with the clatter of a sedan run through the entrances and set down with an air in these select abodes.

Even the newly-built or reconstructed houses here are in keeping with the old tradition. A sort of archæological recrudescence has resulted in the earlier Georgianism clasping hands, so to speak, with the neo-Georgianism; and so a sort of apostolic succession in architecture has been evolved in all this quarter, preserving that quality of selection and restraint which gives it an unique air; and as one looks at its houses one has somehow that pleasant feeling which Goethe experienced when the sun glittered on the gilt vane at Frankfort.

In the April issue of the *Review* Mr. Robert Lutyens will discuss the Estate as it is today.

CORRESPONDENCE

CHARING CROSS BRIDGE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—According to "Ponderivo" (paragraph 1), the scheme to be carried out is embodied in a plan by Sir Edwin Lutyens shortly to be published, and "Ponderivo" commends this plan by a process of anticipatory admiration—although he confesses he has not seen it and although no one else has done so, and for the excellent reason that it does not exist.

"Ponderivo" next states (para. 5) that the scheme of the Bill is a plan completely recast by Sir Edwin Lutyens from the official scheme prepared by the engineers; and he further tells us that "it is foolish to suggest that Sir Edwin had not a free hand in this recasting."

In the whole of this "Ponderivo" is entirely astray. Instead of (1) the engineers' official scheme; (2) Sir Edwin Lutyens' Bill scheme, recast from it; and (3) the admired scheme by Sir Edwin to be published shortly and which is to be carried out, there is, and will be—unless the Bill is upset—only one scheme, and that scheme is the engineers' official scheme, which is also the Bill scheme, and the scheme it is intended to carry out.

The only alterations made by Sir Edwin Lutyens in the engineers' official plan, so far as is known to anyone—except "Ponderivo"—consisted, apparently, in the rounding of certain corners, and the replacing of circus by octagon, and so forth: the plan attached to the Bill is in all essential particulars and details believed to be identical with the engineers' official plan.

The questions asked in Mr. Keen's ill-fated letter have never been answered by the Minister, nor by anyone else—except, again, by "Ponderivo": when they were pressed upon the Minister by the deputation, they were turned aside by him and a direct answer avoided. Those questions, it is to be known, are thoroughly well-informed questions; they are crucial; they throw down the challenge that Sir Edwin Lutyens was called in only late in the day, to give formal effect to Mr. Baldwin's promise that an architect would be consulted, and for the purpose of casting a gloss of æsthetic approval upon the tortured lucubrations of engineers, when, in fact, the reference to Sir Edwin did not include the essential or objectionable points of the scheme at all.

The Minister has withheld the simple answer which would establish the good faith of the Government, and no one but "Ponderivo"—least of all anyone who observed the elusive devices of the Minister when pressed by the deputation—has any doubt that the Minister has avoided answering the question because the only answer he could give would admit the impeachment. The "foolish" suggestions in Mr. Keen's letter are exactly true—that is to say the position of the station, the position of the bridge, the high-level northern approach from the Strand and, probably, the southern approach by the New Cut, together with the whole of the refractory restrictions and conditions imposed by this layout, were fixed as unalterable before the reference to Sir Edwin Lutyens.

"Ponderivo," after praising the unseen—and non-existent—shortly-to-be-published plan of Sir Edwin Lutyens (para. 1) goes on to commend the plan of the Bill (para. 5)—which the plan (para. 1) is to replace—and, on the ground that it is a complete recast of the engineers' official plan, he lavishes such praise upon it as leaves no room for the new delights he anticipates for the plan (para. 1) that is to replace it.

He describes Sir Edwin as having, on the evidence of this recast plan (para. 5), mentally "walked down his streets and considered every corner and detail," when all the time the architect has had no hand whatever in the layout of those streets; so that "Ponderivo's" admiration is not, as he supposes, an act of homage to the genius of a great architect, but is a prostration before the hand-to-mouth, botching expedients by which a parcel of constructionists—totally lacking in vision or imaginative enlightenment—have tried to reconcile the crude, conflicting need of shunters, signal-men, police, bargees, property-owners, motorists and sewermen.

I am the last of all persons to object to his criticism of town-planners' devices, for he has got the whole of his ideas on that subject (apparently) from articles I wrote in these pages five or six years ago; what I call attention to is his reasoning. Why, he asks, should we call in town-planners to help the solution of a problem when their ideas are open to criticism. It is obvious that a town-planner only differs from other men in having had experience in the planning of towns, and to say that one who has experience of a subject knows less about it than one who approaches it for the first time is much more truly "nonsense" than any "Ponderivo" so lavishly ascribes. He might, with equal justice, have said that as the work of all architects is open to adverse criticism, therefore architectural problems are better left in the hands of those who know nothing about architecture.

His attack on the Royal Institute is unfair to the point of being venomous. The Institute, with the allied interests, represents the public; and if Charing Cross Bridge is not a public affair, what sort of affair is it? The devotion, pertinacity, unsparing effort, and entirely disinterested concern for the public weal, which has actuated the men who, under the ægis of the Institute, have given their time and energies, is among those few things that allow us hope for our civilization and for our ideals.

It is amazing and it is terrible that in London, alone of any capital city in the world, and, one may feel, alone even among all considerable cities of her own Empire, it should be possible for municipal polemics, political hocus-pocus, and commercial expediency to put out of court the whole body of enlightened enterprise; and that, while a borough council can raise up a gas main as an obstacle to the Bill, the public has no means of declaring the duty of recognizing those civilizing amenities upon which the happiness, health and spiritual well-being of the populace depends.

H. B. CRESWELL

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Your correspondent, "Ponderivo," apparently considers that the design for which a distinguished architect is joint author should be immune from criticism; but a great many of the younger members of the profession, who do not resent their own work being criticized, quite naturally believe that the work of even the most eminent architects should stand the test of intelligent criticism.

This is so when the subject is a single building, but when it concerns the greatest reconstruction scheme that has ever been attempted in London, involving the expenditure of vast sums of public money, the Royal Institute would appear to be a fit and proper body to examine and give a considered opinion on the proposals. If "Ponderivo" is a member of the Institute and cares to submit to that body his theory of "Scale" in civic design and Charing Cross in particular, it will no doubt be forwarded to the appropriate committee who welcome all constructive suggestions.

The chief criticisms made against the official scheme for the Charing Cross improvement are not concerned with the fact that a high-level bridge is proposed, but that the difficult problem of the re-planning of Central London on the Surrey side has been very largely avoided and left to future generations. The bridge only forms a single unit in the whole plan. It needs little imagination to see that a much greater area of Central London will be affected than that contained within the scheme on which Sir Edwin Lutyens has the honour to advise.

W. HARDING THOMPSON

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—"Ponderivo's" admirable and health-giving chastisement of the R.I.B.A. over its attitude in the Charing Cross Bridge controversy has, unfortunately, come too late to prevent a rather regrettable "scene." Although the letter is so worded as to refer specifically to Charing Cross Bridge, in its general substance of complaint it may be taken to apply equally well to any discussion of importance in which the Royal Institute has recently participated.

But in one particular "Ponderivo" has fallen into the same chasm as the R.I.B.A. He awards a palm to that body for being "instrumental to some extent in ousting steel bridges in favour of stone ones." Now, in so far as the Institute has done this, it has done untold harm.

The fact that so many steel bridges are execrably bad, æsthetically speaking, is no argument against steel as a material. A steel bridge can be a very beautiful thing, as is adequately proved by the illustrations of the Delaware River Bridge (which were published some time ago in this JOURNAL), as well as by the Forth and Sydney Harbour Bridges, and quite a number of others. As it cannot be thought that bad steel bridges are put up out of sheer devilment, it comes to mind that there must be a good reason for using steel, and that the ugliness is due to ignorance or apathy.

In so far as the use of steel is concerned it is clear that this material has strong advantages; it is cheaper, lighter and quicker to erect. From these points of view it is infinitely preferable to stone or concrete, and a bridge owner will generally prefer the subsequent cost of upkeep to the initial costs of delay and material.

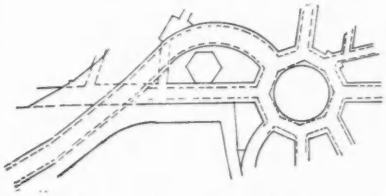
And so the R.I.B.A. would do well to face the facts and see what it can do to make reasonably certain that these steel bridges shall be as beautiful as they can be made. But, instead of this, it apparently condemns the material out of hand, without giving economics another thought. I do not pretend to find a reason for this attitude; but it is quite clear that the engineers will regard it as an admission that the architects find the æsthetic use of steel to be beyond them. And, that being so (after all the talk and drumming into them that only architects can produce beautiful designs), what is more likely and more excusable than that they should turn sharp round from their present efforts in the direction of beauty, regret steel as an unfortunate necessity, and let the appearance of their bridges go hang?

M. L. ANDERSON

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—It is somewhat difficult to follow your correspondent "Ponderivo," in his lengthy apologia for the official Charing Cross Bridge scheme. That Sir Edwin Lutyens has done his best to make a complicated engineering scheme architecturally palatable is not the main question. Supposed railway exigencies have resulted in a scheme which is nothing more nor less than a road system contrived upon the alignment of an obsolescent railway system, and directly antagonistic to the most rational development of the southern side.

Your correspondent's reference to civic design appears to ignore the main principles of simplicity, economy, and directness. All these are lacking in the official plan, which no amount of architectural treatment can redeem.



The sketch illustrates the somewhat unusual, not to say extraordinary, device by which in the official scheme the new bridge road eventually descends into the Waterloo Bridge Road, and enters a circus of the very kind which your correspondent so particularly dislikes, in which there are no less than eight junctions with roads. The contribution of the architect to this detail appears to have been to suggest a tower, in a very awkward corner, in order to close the vista of the main bridge road.

Again, the right-hand spur road to the bridge head on the southern side is made to balance that on the left connecting to the Waterloo Bridge head. The latter is curved of necessity, owing to the bend of the river, but is practically level. The former, apparently to balance the other, is also made to curve, although the river does not bend to the same extent; but it has to *descend* to meet the level of York Road. This is effected by what can only be described as a very clumsy "dog-leg," both crooked and on an incline, which, moreover, cuts Belvedere Road in half; the portion towards the main bridge road being actually approachable by steps at each end!

But let us take the circus or square at the junction of the Strand and the bridge road. How it may be easier for traffic to proceed around two sides of a square rather than round a circle is not apparent; but in any case, the "circus" offers no relief for northbound traffic, which, together with that coming from Trafalgar Square, next door to the "circus," still has to pass through the congested artery of Charing Cross Road by the corner of the National Portrait Gallery, no widening being indicated, or alternative northbound route.

The criticisms put forward have, in the main, been just; the weakness has, apparently, been the lack of any kind of unanimity in a definite alternative. It is not necessary to assume that there are only two solutions to this complex problem, a high-level Strand bridge and an Embankment connection. There is, for example, the direct Northumberland Avenue approach into Trafalgar Square, rising over the Embankment, indicated in one or two schemes put forward. On the other side the problem, one imagines, is to come to earth as soon, not as late, as possible.

"VERIPONT"

THE ÆSTHETIC FRONT

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I was interested to see that Mr. H. B. Creswell, in the letter which he addressed to you last week, defined architecture as "the poetry of building." How nice it would be if Mr. Creswell were to take upon himself to instruct students in design! I feel sure that they would find his definition of architecture so helpful. As he is in favour of the registration of architects who regard their art as the poetry

of building, is he also prepared to advocate the introduction of a Bill for the registration of poets?

A. TRYSTAN EDWARDS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—An artist cannot be made by Act of Parliament, and Mr. Trystan Edwards's final paragraph puts in a nutshell the sentiments of all architects who favour the Registration Bill. We do not need the approval of anyone as "artists": our own feelings during the production of a work are sufficient reward for us. But we *do* need protection as men trained in practical matters connected with building and its arrangement, and also as men pledged to *an honourable code of professional conduct*. This last clause needs underlining, for a man who rigidly adheres to a strict code is fighting with tied hands against the unauthorized, ill-educated "creepers-in" to the profession, who flatter the business instincts of a client by offering to do work at ridiculous fees, at the same time deceiving him most amazingly as to their real methods of ensuring very adequate reward for their clumsy efforts.

It is for this recognition as trained men, and men of strict honour, that we need the support of the Registration Bill and are doing all we can to get it passed by Parliament. W. ARTHUR VERCOE,

President, Devon and Cornwall Architectural Society.

REFERENCE BOOKS

SPON'S POCKET PRICE BOOK

THIS pocket price book has now reached its fifty-seventh year of publication. Since the last edition the prices throughout the book have been thoroughly revised, and are based on actual prices in Bills of Quantities for various contracts now being carried out under the supervision of Mr. Clyde Young, F.R.I.B.A., the editor, who has made every endeavour to keep the contents up to date. Mr. Young states that under the grading system labour rates vary in different districts. The difference between the highest and the lowest rate is as much as 7d., and in order to render the Price Book more useful the Rates of Wages under the various grades, together with an alphabetical list of towns to which they apply, is included in the present edition.

Spons' Architects' and Builders' Pocket Price Book, 1930. Edited by Clyde Young, F.R.I.B.A. E. & F. N. Spon, Ltd. Price 5s. net (postage 4d.).

LAXTON'S AND LOCKWOOD'S BUILDERS' PRICE BOOK

LAXTON'S AND LOCKWOOD'S Builders' Price Book has now reached its 113th edition. Its features are too well known to need special mention, but the fact should perhaps be emphasized that all the information has been subjected to the most thorough revision and correction, and that it will be found at least as reliable as its predecessors.

As in previous editions, the prices in general apply to London, but sufficient details are given in the analyses, tables and memoranda, under the various trade headings and elsewhere, to enable the book to be used in the provinces equally as well as in London. The current rates of wages in the building trades throughout England and Wales are also given.

The alphabetical list of specialities and proprietary articles and brands, some 10,000 in all, has again received very careful attention and has been extended. Experience has shown that this is one of the most popular sections of the book. It is printed on blue paper and gives the name and address (and in most cases the telegraphic address and telephone number) of the manufacturer of each article.

Laxton's and Lockwood's Builders' Price Book. Kelly's Directories, Ltd. London. Price 7s. 6d. net, post free.

THE CONCRETE YEAR-BOOK

THE new edition of this well-known work of reference, now in its seventh year, has been further enlarged by forty pages. The handbook section, of 200 pages, contains a great deal of valuable information of everyday use to all concerned with civil engineering and constructional work. Chapters are included giving tabulated designs of foundations, floors, walls, beams, columns and other building members to carry various loads, illustrated with clear diagrams.

The directory section contains a complete directory of the concrete and allied industries, with a list of trade names and brands, and the names and addresses of their proprietors. In the catalogue section are 350 pages describing the businesses and products of firms engaged in the concrete industry or supplying plant and materials for constructional work, forming a very complete guide for those in need of a contractor to carry out specialist work, or machinery and materials for a particular purpose.

The Concrete Year Book, 1930. Edited by Oscar Faber, O.B.E., D.SC., M.INST.C.E., and H. L. Childe. Concrete Publications, Ltd. Price 3s. 6d. net.

SOCIETIES AND INSTITUTIONS

OLD AND NEW ARCHITECTURE

The Hon. Humphrey Pakington, lecturing on "Old and New Architecture" at the Architectural Association last Saturday, said that the understanding of architecture was an affair of great complexity, and it was a mere platitude to say that the lack of critical appreciation of the art by the public was due to a lack of training in the language of archi ecture. We would not expect a person to be musical just because he had read a history of music and knew the dates of Beethoven's birth and death. Yet all the architectural training which the average person got was a history of the styles. He could tell the Doric Order from the Ionic, and the Elizabethan manner from that of Queen Anne.

The educated layman knew his styles, and he might know his preferences, but he could not usually back them with reasoning. He could sort architecture into styles, but could not trace the thread of beauty which linked those styles.

Mr. Pakington interspersed his lecture with many delightful lantern illustrations and, showing a slide of Westminster Abbey from the air, he said that symbolism in architecture was an interesting subject. The symbolism of the classics was directed to the representation of abstractions, while the Gothic builders, far less subtle, imitated concrete realities. It seemed probable, indeed, that the symbolism of the Middle Ages had its origin in accident rather than in design. The typical church plan, such as seen at Westminster Abbey, became cruciform because the addition of transepts was the obvious method of giving more accommodation within range of the High Altar.

Mr. Pakington concluded by saying that the subordination of individuality to the laws of design was too complete. The very conditions under which architects worked—the varied requirements of planning, the elasticity of materials—allowed a wide individuality of treatment within the limits of the rules of the game. And in the age of organization which we were approaching we should need the delightful variation of human personality shining through the ordered arrangement of a building.

SOUTH WALES INSTITUTE OF ARCHITECTS' ANNUAL MEETING

At the annual general meeting of the South Wales Institute of Architects (Central Branch), held at Cardiff, the following officers and members of the executive committee were elected: Chairman, Mr. H. Norman Edwards; hon. treasurer, Mr. H. Teather, F.R.I.B.A.; hon. secretary, Mr. W. S. Purchon, M.A., A.R.I.B.A.; committee, Messrs. Percy Thomas, F.R.I.B.A., J. Llewellin Smith, L.R.I.B.A., Ivor Jones, A.R.I.B.A., J. Williamson, A.R.I.B.A., and T. Alwyn Lloyd, F.R.I.B.A.; representatives of associates and students, Miss O. E. Price and Mr. A. S. Fletcher.

The following were elected as members

of the Council of the South Wales Institute of Architects: Messrs. H. Norman Edwards, W. S. Purchon, M.A., A.R.I.B.A., J. Williamson, A.R.I.B.A., Percy Thomas, F.R.I.B.A., J. Llewellin Smith, L.R.I.B.A., Edgar Smith, A. G. Lynham, F.R.I.B.A., C. F. Jones, A.R.I.B.A., J. B. Fletcher, W. D. Thomas, Lennox Robertson, F.R.I.B.A., Gordon Griffiths, and Lewis John, M.A., B.ARCH., A.R.I.B.A.; representatives of associates and students, Messrs. H. J. Hughes, A. G. Fletcher and A. J. Hayes.

THE PALATINE HILL, ROME

Sir Banister Fletcher, P.R.I.B.A., lecturing at the Central School of Arts and Crafts, described the Palaces of the Roman Emperors on the Palatine Hill, Rome, and showed how, from the ruins on the site, it was possible with the aid of knowledge and imagination to reconstruct these buildings in one's mind's eye, so as to get some idea of the appearance of Rome in the days of the Cæsars.

R.I.B.A. PRIZES AND STUDENTSHIPS

The R.I.B.A. has issued a pamphlet dealing with their Prizes and Studentships for 1930-1931. It contains full information upon the various prizes and studentships, together with, where applicable, the detailed programme for the competitions. Copies are obtainable from the R.I.B.A., 9 Conduit Street, W.1. Price 1s., exclusive of postage.

R.I.B.A. INTERMEDIATE EXAMINATION

Belfast will be an additional centre for the R.I.B.A. intermediate examination, provided that at least five candidates for examination at that centre are forthcoming on each occasion.

PROBATIONERSHIP OF THE R.I.B.A.

The Council of the R.I.B.A. has decided to include in the list of examinations recognised for the Probationership of the R.I.B.A. the preliminary examination of the Surveyors' Institution and the preliminary examination of the Institution of Civil Engineers.

THIRD INTERNATIONAL CONGRESS OF MODERN ARCHITECTURE

The Third International Congress of Modern Architecture will be held at the Palais de Beaux-Arts, Brussels, on October 2, 1930. The principal subject of the congress will be a discussion of "The Minimum Dwelling," a continuation of the theme which occupied the attention of the last congress held at Frankfurt in 1929.

There will be an exhibition of work dealing with this subject, including—in addition to the material shown at Frankfurt—plans of layouts, details of new methods of construction, and schemes which do not comply with existing building codes. There will also be a stand devoted to the town of Frankfurt, and public lectures on the exhibition.

It is proposed to form an English section of the congress, and any architect requiring further information should apply to Mr. Howard Robertson, F.R.I.B.A., 36 Bedford Square W.C.1.

FOREIGN WORK COMMITTEE TOURS

The Foreign Work Committee of Leplay House are arranging to take a group of their members and others to North Africa during the Easter vacation. They will have as their leader Mr. E. M. Keith Ellerton, F.R.I.B.A., of the University of Liverpool. The route covered is Algiers to Biskra and Touggourt, then to Tunis via Timgad and Constantine. In addition, a group will go to Holland for the purpose of studying art and architecture, and a further group will go to Brittany, making Carnac their centre, for archæological studies. Particulars are obtainable from Miss Margaret Tatton, Director, Leplay House Foreign Work Committee, 65 Belgrave Road, S.W.1.

TRADE NOTE

Those responsible for the acoustic effects in sound film studios and cinemas have found Masonite to be of invaluable service in facilitating the achievement of the best results. This conclusion is reached after a perusal of a new book just issued by Masonite, Ltd., to explain the properties and application of the material. In this country Masonite products have been adopted by such leading film-producing companies as the Gaumont Co., Ltd., British International Pictures, Ltd., British and Dominions Film Corporation, Ltd., Twickenham Film Studios, Ltd., British Screen Productions, Ltd., and the Blattner Picture Corporation, Ltd. As an instance, in both the studios of the Gaumont Co., Ltd., Masonite has been used throughout to provide acoustic correction for the production of sound films. In this case the problem was a particularly difficult one, as the studios, owing to their location, are especially subject to airborne sounds from electric trains and heavy road traffic. The fact that the experts of this company have expressed their complete satisfaction with the work carried out is some indication of the value of the material employed.



Scene from the Gaumont sound film "High Treason," showing furniture and panelling constructed of Masonite.

In the recent production by the Gaumont Co., Ltd., of the highly successful film "High Treason," Masonite Presdwood was used for the construction of furniture, fittings, and "sets," and the results achieved show the possibilities of this material as a decorative medium in the hands of a skilled designer. The publication is profusely illustrated and shows the adaptability of the products to every type of building. It is well produced, and contains samples of the several varieties of Masonite inside the back cover.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :—

Imhof House, 112-116 New Oxford Street (pages 419-422). General contractors, Bovis, Ltd. Sub-contractors : Huntley and Sparks, Ltd., audition rooms soundproofed with "Cabot's Quilt"; Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt; Indented Bar and Concrete Engineering Co., Ltd., reinforced concrete; United Stone Co., stone; Stuart's Granolithic Co., Ltd., artificial stone; Aston Construction Co., Ltd., structural steel; Roberts, Adlard & Co., Ltd., slates; Luxfer Co., Ltd., patent glazing and casements; Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., patent flooring and stairtreads; H. Eldred & Co., Ltd., central heating (the boiler is of the White Rose, Series B, sectional type, of a rated capacity of 545,600 B.T.U.s per hour); Griersons, Ltd., electric wiring; Bagues, Ltd., and Dernier and Hamlyn, Ltd., electric light fixtures; Venning & Co., sanitary fittings; Walter Cassey, Ltd., locks and door fittings and lever fastenings to doors to audition rooms; Kingsmill Art Metal Co., metalwork; Gilbert Seale & Co., carving; Anselm Odling, Ltd., marble; Van Straaten & Co., tiling; Marryat and Scott, Ltd., lifts.

The Copse House, Surbiton (pages 423-426). General contractors, W. H. Gaze and Sons, Ltd. Sub-contractors : Crittall Manufacturing Co., Ltd., metal windows; The Abbey Heating Co., Ltd., heating and hot water supplies; Southwater Brick Co., brick steps and landing; Warner, roof tiles; S. C. Pearce & Co., wrought metal work; The Plasm Decoration Co., cast stonework; The Leeds Fireclay Co., Ltd., sanitary goods; O'Brien, Thomas & Co., firegrates; Engineering Works, Ltd., electrical work; Bonesgate Brick and Tile Co., facing brickwork; Yannedis & Co., hardware; Terrano, Ltd., floor tiles.

Astoria Cinema, Old Kent Road, S.E. (pages 429-433). General contractor, H. R. Watt. Sub-contractors : The British Reinforced Concrete Eng. Co., steel reinforcements; Powers and Deane, Ransome's, Ltd., contructional steelwork; London Plenum Heating Co., heating and ventilation; British Vacuum Cleaning Co., vacuum cleaning; Tredegars, Ltd., electric wiring, electric light fixtures and electric heating; J. W. Gray and Sons, lightning conductors; S. Wright & Co., Ltd., fibrous plaster; J. Starkie Gardner, Ltd., metal work and canopies; West Bromwich Casement Co., steel casements; Asbestos Cement Building Products, Ltd., asbestos roofing; British Challenge Glazing Co., patent glazing; H. and C. Davis & Co., Ltd., handrailing, escape stairs, etc.; John Compton Organ Co., organ; Ragusa Asphalt Paving Co., asphalt; Hitchins Laminated Wood Products, Ltd., laminated and veneered doors; Wiggins-Sankey, sanitary fittings; Allands, Ltd., decorative electric light fittings; Frank Burkitt, fire curtain, projection room shutters and stage lantern; Concrete, Ltd., precast balcony floor; Franco-British Electrical Co., Ltd., outside and illuminated signs; Brookes, Ltd., artificial stone; Western Electric Co., talking apparatus equipment; W. Lusty & Co., Lloyd loom furniture; Marb-l-cote Distributing Corporation, Ltd., marb-l-coting; North British Rubber Co., rubber flooring; Jackson Boilers, Ltd., kitchen equipment; Williams and Williams, Ltd., special windows; Plastona (New Power Saver Co.), Ltd., waterproofing material; Frigidaire, Ltd., Frigidaire equipment; Davy Paxman, boilers; James & Co., door furniture; Arthur Foulds, Ltd., joinery; J. Shoolbred & Co., carpets, seating and furniture; Harrods, Ltd., shrubs and trees; J. Brocklin & Co., projection room fittings.

First Church of Christ, Scientist, Bournemouth (pages 444-445). General contractors, Burt and Vick. Sub-contractors : Bath and Portland Stone Firms, Ltd., and R. T. Templeman and Son, stonework; Roberts, Adlard & Co., Ltd., tile roofing; Engert and Rolfe, Ltd., asphalt roofing; Art Pavements and Decorations, Ltd., marble paving; Bookbinders, Ltd., fibrous plaster; John Williams and Sons (Cardiff), Ltd., steel windows; Gardiner, Sons & Co., Ltd., steelwork; J. Caslake, art metal work; G. N. Haden and Sons, Ltd., heating and ventilation; Shanks & Co., Ltd., sanitary fittings; Aish & Co., Ltd., electrical work; Metro-Vick Supplies, Ltd., electroliers; James Gibbons, Ltd., door furniture; Brown and Broscomb, Ltd., leaded lights and glazing; Bennet Furnishing Co., Ltd., seating.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATION

5762. Maughan, W. Building construction, etc. February 21.

SPECIFICATION PUBLISHED

307434. Junkers, H. Structural members, more particularly for use in building walls.

ABSTRACT PUBLISHED

323532. Carson, N. B. Floors; roofs.

COMPETITION CALENDAR

March 31. — The Accrington Corporation invites architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor : Herbert J. Rowse, F.R.I.B.A. Premiums : £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars, may be obtained from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before March 31.

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated in 1930. Assessors : Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums : £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs : April 28.

June 14. — The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit, £1 1s. Latest date for submission of designs : June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor : Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to Mr. W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 31.—The Luton Town Council invites architects to submit designs for the proposed Town Hall which is to be built on the site of the old town hall, at an approximate cost of £250,000. Assessor : Sir Brumwell Thomas. Premiums : £500 to £100. Latest date for submission of designs : July 31.

No date.—The Leicester Corporation invites local architects to submit designs for the erection of a library at West Humberstone. Assessor : Hugh Gold, F.R.I.B.A. Premiums : £75, £50, and £25.

Architects' Wills

Mr. Joseph Leeming, F.R.I.B.A., of Beverley, Wynn Avenue, Colwyn Bay, architect, left £13,175 (net personalty £11,110).

Mr. Segar Segar-Owen, of Palmyra Square Chambers, Warrington, and of Beaumaris, Anglesey, F.R.I.B.A., left £36,711.

THE ARCHITECTS' DIARY

WEDNESDAY, MARCH 12

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Board of Architectural Examinations Committee. **5 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Informal Meeting. "Land Reclamation Work." By F. M. G. Du-Plat-Taylor, M.INST.C.E. Sir Cyril Kirkpatrick will preside. **6 p.m.**

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Roman Architecture." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C. 2. Open every Tuesday, Wednesday, Thursday, and Friday until September next. 10 a.m. till 5 p.m. **10 a.m**

LONDON BUSINESS EFFICIENCY EXHIBITION, White City, Shepherds Bush, W. Open until March 15.

THURSDAY, MARCH 13

R.I.B.A., 9 Conduit Street, W.1. Meetings of the Board of Architectural Education Schools Committee, 3 p.m.; Science Standing Committee, 4.30 p.m.; and Prizes and Scholarships Committee, 5 p.m. Rome Scholarship *en loge* Competition. **3 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Pyramid Building Problems: Manpower Organization in the Pyramid Age." By D. Davidson, F.R.S.A. **6.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **6 p.m.**

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. Debate on "Is the Skyscraper Architecture?" Affirmative, D. B. Smith. Negative, G. L. Crowther. **7 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Annual Dinner to be held at the Adelphi Hotel, Liverpool. **7.30 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. "Charing Cross Bridge." By Lieut.-Colonel Sir Kenyon Vaughan Morgan, M.P. **4.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Walnut and Mahogany Furniture from 1710 to 1750." By Herbert Cescinsky. **7.30 p.m.**

FRIDAY, MARCH 14

R.I.B.A., 9 Conduit Street, W.1. Rome Scholarship *en loge* Competition.

TOWN PLANNING INSTITUTE. At the Caxton Hall, Caxton Street, Westminster, S.W.1. General Meeting. "Town Planning and the Man in the Street." By Capt. B. S. Townroe, M.A., HON. A.R.I.B.A. **8 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to the Science Museum, Exhibition Road, South Kensington, S.W. 7. **2.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At Loughborough. Ordinary Meeting. "Some Experiments on Earth Pressure." By Dr. T. E. N. Fargher, M.ENG.PH.D., A.M.INST.C.E. **6.30 p.m.**

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. Sessional Meeting. At the Council Chambers, Middlesbrough. Discussion on: "Ventilation of Cinemas, etc." To be opened by S. W. Walton, M.B., B.S., D.P.H. 4 p.m. Tea 5 p.m. Visit to the New School Clinic, Woodlands Road. 6 p.m. Discussions on "Ventilation of Cinemas, etc.," and "Flooding from Streams at Middlesbrough." To be opened by S. E. Burgess, M.INST.C.E. **7 p.m.**

SATURDAY, MARCH 15

Sunrise, 6.16 a.m. Sunset, 6.3 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Messrs. Gamage's New Premises, near Marble Arch. Meet at entrance in North Row. **2.30 p.m.**

ROYAL SANITARY INSTITUTE, 90 Buckingham Palace Road, S.W.1. At the Council Chamber, Middlesbrough. Meet at the Municipal Buildings for visits to Housing Scheme areas: Acklam Hall, Middlesbrough, Redcar Main Trunk Road, and Main Sewer Works, Cargo Fleet Lane. **10.30 a.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W. 1. Students' Visit to the Building Research Station, Watford.

SUNDAY, MARCH 16

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. Inaugural Address by Herbert Morrison, M.P. **3.30 p.m.**

MONDAY, MARCH 17

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Executive Committee. 4.30 p.m. General Meeting. 8.30 p.m. Presentation of the Royal Gold Medal to Dr. Percy S. Worthington, F.R.I.B.A. **4.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "High Tension Sub-station Control Gear." To be opened by A. F. Harmer. **7 p.m.**

TUESDAY, MARCH 18

KING'S COLLEGE, Strand, W.C.2. Faculty of Arts, Last of a course of nine public lectures on "Italian Paintings." By Percy Dearmer, M.A., HON. A.R.I.B.A. (Lantern Illustrations.) **5.30 p.m.**

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. Paper on "The Lighting of a Large Liner." Light Refreshments at 6.30 p.m. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Voltage Control of Large Alternators." By H. W. Taylor. **7 p.m.**

INSTITUTE OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. "Electric Locomotives." By D. J. Watkins.

INSTITUTE OF ARBITRATORS. Luncheon at the Criterion Restaurant, Piccadilly, W. 12.45 for 1 p.m. **1 p.m.**

WEDNESDAY, MARCH 19

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Annual Reception. **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Design in Town Planning." By Dr. Raymond Unwin, F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Portrait in Later Monumental Sculpture." By K. B. Esdaile (Mrs.). Charles Reed Peers, C.B.E., P.S.A., F.B.A. will preside. **8 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "The Beautiful Town." By the Very Rev. the Dean of Manchester. Rev. Harold Anson, M.A., will occupy the chair. **8 p.m.**

THURSDAY, MARCH 20

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Architects' Working Drawings. Until April 3. Also Students' Evening in connection with this Exhibition. **8 p.m.**

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. Election of Officers. "Mainly About Germany." By Howard Robertson, F.R.I.B.A., S.A.D.G. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "London in the Middle Ages." By D. Martin Roberts, M.A. (Lantern Illustrations.) **7.30 p.m.**

FRIDAY, MARCH 21

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Annual Meeting at the Royal Institute Galleries, Piccadilly, W.1. 3 to 5.30 p.m. **3 p.m.**

BRITISH ELECTRICAL DEVELOPMENT ASSOCIATION. Annual Luncheon at the Savoy Hotel, Strand, W.C. 12.15 for 1 p.m. **1 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "The Healthy Town." By Dr. Leonard Hill, F.R.S. Lady Maurice will occupy the chair. **8 p.m.**

SATURDAY, MARCH 22

Sunrise, 6 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Houses at Home and Abroad." By Oswald P. Milne, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Post Office (London) Railway, Mount Pleasant, N.W. **4 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to the offices of the Allied Newspapers, 200 Gray's Inn Road, W.C. 1. 4.30 p.m. and 6.30 p.m. **4.30 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. Conference on Architecture and Modern Civilization. W. H. Ansell, M.C., F.R.I.B.A., and Elizabeth Scott (Miss), A.R.I.B.A. 2.30 till 4.15 p.m. Frederic Towndrow, A.R.I.B.A., and Minnie Pallister (Miss). 5 till 6.30 p.m. Helen Ward (Miss) will occupy the chair on both occasions. **2.30 p.m.**

MONDAY, MARCH 24

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Style in Sculpture." By Eric Gill. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

IDEAL HOME EXHIBITION, Olympia, W. Organized by *The Daily Mail*. Open until April 17.

TUESDAY, MARCH 25

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Dominions and Colonies Meeting. "The Work of the British Association in Relation to the Empire." By O. J. R. Howarth, O.B.E., M.A. **4.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North Midland Centre. At the Hotel Metropole, Leeds. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

WEDNESDAY, MARCH 26

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Architecture of To-day and To-morrow." By Howard Robertson, M.C., F.R.I.B.A., S.A.D.G. Charles Marriott, HON. A.R.I.B.A., will preside. **8 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Nature and Modern Design." By Professor R. V. Gleadowe. (Lantern Illustrations.) **7 p.m.**

THURSDAY, MARCH 27

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Some New Ideas on the Design of Dams." By E. Godfrey. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Lacquerwork: Its History, Influence and Decorative Qualities." By E. R. Gribble. **7.30 p.m.**

FRIDAY, MARCH 28

INSTITUTION OF ELECTRICAL ENGINEERS. North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Marine Diesel Installations, with particular reference to Auxiliary Machinery." By J. Calderwood, M.SC. **7.15 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Annual General Meeting. Discussion on "Mechanical Solution of Statically Indeterminate Structures." To be opened by H. W. Coultas, M.SC. **6.30 p.m.**

UNIVERSITY SETTLEMENT, Nile Street, Liverpool. Latest date for application for accommodation at the Housing and Town Planning Meetings.

SATURDAY, MARCH 29

Sunrise, 5.44 a.m. Sunset 6.27 p.m.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. Various lectures and conferences for children on "Beautiful England in Education." 3 and 6.30 p.m. Also visit to Welwyn Garden City. (3s. return.) Meet at rear entrance of Guildhouse at 2.30 p.m. **2.30 p.m.**

MONDAY, MARCH 31

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "Loud-Speakers." To be opened by Captain P. P. Eckersley. **7 p.m.**

ACCRINGTON COMPETITION. Latest date for submission of designs for the New Police and Fire Stations.

TUESDAY, APRIL 1

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper by H. Stratton Davis, M.C., F.R.I.B.A. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Annual Business Meeting. **7 p.m.**

WEDNESDAY, APRIL 2

LONDON SOCIETY, Lancaster House, St. James's, S.W. 1. Visit to Wellington Barracks and the Guards' Chapel, under the guidance of Sir Neville R. Wilkinson, K.C.V.O., F.S.A. **2.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Tees-side Sub-Centre. At the Cleveland Technical Institute, Middlesbrough. Annual General Meeting, 7 p.m. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." 7.30 p.m. **7 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "Regional Planning." By Raymond Unwin, F.R.I.B.A. Helen Ward (Miss) will occupy the chair. (Lantern Illustrations.) **8 p.m.**

THURSDAY, APRIL 3

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. **7 p.m.**

FRIDAY, APRIL 4

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "The Decentralization of Industry." By Captain R. L. Reiss. Dr. Sybil Plant will occupy the chair. **8 p.m.**

SATURDAY, APRIL 5

Sunrise, 5.29 a.m. Sunset, 6.38 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Marble Arch Flats, adjoining Regal Cinema. Meet main doorway in Great Cumberland Place at 2.30 p.m. **2.30 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. Conference on Planning the England of the Future. Hon. Humphrey Pakington, A.R.I.B.A., and A. T. Pike. 2.30 till 4.15 p.m. Professor Percy Dearmer, D.D. 5 till 6.30 p.m. F. J. Hiorns will occupy the chair on both occasions. (Lantern illustrations.) **2.30 p.m.**

MONDAY, APRIL 7

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Antonio da San Gallo the Younger." By J. Hubert Worthington, O.B.E., M.A., A.R.I.B.A. **8 p.m.**

TUESDAY, APRIL 8

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Textile Lighting," By S. Anderson, B.SC. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Royal Technical College, Glasgow. Annual General Meeting and Ordinary Meeting. **7.30 p.m.**

UNIVERSITY SETTLEMENT, Nile Street, Liverpool. At the David Lewis Club, Great George Place, Liverpool. Lectures on Housing and Town Planning subjects. Visits to new housing estates, tenements and slum districts. Papers will be given at 9.45 a.m. and 8 p.m. Applications for accommodation not later than March 28. Also April 9 and 10. **9.45 a.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

THE BARKING U.D.C. is to borrow £51,770 for the erection of the new Parsloes School.

The BARKING U.D.C. has asked the surveyor to prepare plans for improving the bridge over Loxford Water.

The BARKING U.D.C. has obtained sanction for the construction of an open-air swimming bath and children's paddling and boating ponds, at a cost of £22,800.

Plans passed by the BARKING U.D.C.: Joinery workshop, Kings Road, for Mr. W. H. Newton; seven shops, Ripple Road, for Mr. J. P. Graffy; evaporating house, for Messrs. Gross, Sherwood and Heald, Ltd.; alterations, "Cape Lodge," North Street, for the Cape Asbestos Co., Ltd.; alterations and additions, 23 Ripple Road, for Midland Bank, Ltd.; oil-blending plant, West Bank, for Russian Oil Products, Ltd.

The Brentford and Chiswick Joint Education Committee is to erect a school for 300 pupils in Lionel Road, BRENTFORD.

Plans passed by the CAMBERWELL B.C.: Parish hall, Brunswick Square, for Messrs. Newberry and Fowler; shop, rear of 125 Queen's Road, for Mr. H. W. Cash; additions, 106 Lordship Lane, for Mr. D. J. Moss; shops, Peckham Rye, for Mr. H. W. Cash; additions, Wyndham Road, for Mr. A. V. Goad; building, High Street, for Mr. F. T. Verity.

The Middlesex C.C. is to obtain tenders for the erection of a nurses' home at HAREFIELD Sanatorium.

The Middlesex C.C. is to widen the Sheepcote Road and the Forty Lane railway bridges between HARROW and WEMBLEY, at a cost of £16,000.

The ILFORD Corporation is ascertaining the amount of grant likely to be obtained from the Ministry of Health for a scheme for extensions at the maternity home, to cost £40,375.

Plans passed by the ILFORD Corporation: Rebuilding "Beehive" public-house, Beehive Lane, for Mr. F. M. Kirby; eight houses, Hamilton Avenue, for Mr. A. G. Scholes; extension, Vicarage Lane, for the Plessey Co.; alterations, 1 Beehive Lane, for Westminster Bank, Ltd.; extension of golf club-house, Wanstead Park Road, for Mr. R. C. Arnold; fifty-four houses, Collinwood, Glenwood and Kenwood Gardens, for Mr. A. Smith; eight houses, Horns Road, for Mr. J. W. Lohden; two houses, Chadwell Heath Lane, for Mr. F. Smith; ten houses, South Park Crescent, for Mr. J. Aldridge; 101 houses, Elstree, Fairway, Southbourne and Loxford Gardens, for Mr. T. B. Goodwin; alterations, 47 Cranbrook Road, for Messrs. Mullen and Lumsden, Ltd.; four houses, Perryman's Farm Road, for Mr. A. G. Scholes; 454 houses and twenty-six shops, Aldborough Grange Estates, for Suburban Developments, Ltd.; three houses, Baxter Road, for Mr. T. Anders; forty-four houses, Rosemary Drive, for Messrs. P. G. Ashton and Sons; ten houses, Wanstead Park Road, for Mr. A. P. Griggs; new premises for United Dairies, Ltd., High Road, for Mr. F. T. Dear; fifteen houses, Loxford Lane, for Mr. S. W. Bedford; alterations, 213 High Road, for Maypole Dairy Co., Ltd.; seven shops, Green Lane, for Messrs. Lewis, Solomon and Son; shops and dwellings, Eastern Avenue, for London Co-op. Society, Ltd.; two shops and houses, Ley Street, for Messrs. Haines and Warwick, Ltd.; six shops and dwellings, Ley Street, for Messrs. Montagu Holmes and Sons; shop and stores, High Street, Barkingside, for Marrable Bros.; workshop, Ilford Hill, High Road, for Messrs. Grant and Livingston.

Plans passed by the POPLAR B.C.: Additions, Dockland Settlement, East Ferry Road, for Messrs. J. Greenwood, Ltd.; additions, Scandinavian Sailors' Home, Garford Street, for Mr. A. Gordon; offices, 306 West Ferry Road, for Messrs. Hooper, Cushen and Co.; additions, 49 Bow Road, for Messrs. J. C. Bowyer, Ltd.; additions, Raleana Wharf, Raleana Road, for Mr. R. G. Muir; additions, "The Sabbarton Arms," Northumberland Street, for Messrs. T. G. Waterman & Co.; rebuilding clubroom, Settlement of the Holy Child, 130 Poplar High Street, for Messrs. J. Marsland and Sons, Ltd.

Plans passed at PUTNEY: Three houses, Dover House Road, for Messrs. William Willett, Ltd.; house, Woodborough Road, for Mr. C. T. Crouch; building, Putney Bridge Road and Deodar Road, for Messrs. A. J. Cripps & Co.; additions, Prince of Wales Dairy, Erpingham Road, for Mr. F. Dear.

Plans passed by the WANDSWORTH B.C.: Four houses, Seymour Road, Southfield, for Mr. A. G. Jenkins; additions, 29 Crescent Grove, Clapham, for Messrs. Bridges and Clarke, Ltd.; additions, 54 Tooting High Street, for Messrs. Jones Bros. (Streatham), Ltd.; house, King's Avenue, Clapham, for Mr. G. W. Dorley-Brown; alterations and additions, "Old Sergeant" public-house, Garrett Lane, Fairfield, for Messrs. Trollope and Colls, Ltd.; alterations and additions, 69 Victoria Road, Clapham, for Mr. D. J. Rawkins.

The Middlesex C.C. is to reconstruct the Swan and Bottle bridge at High Street, UXBRIDGE, at a cost of £6,715.

EASTERN COUNTIES

The Essex Education Committee has approved plans for the erection of assembly hall, library and office accommodation at the MALDON Grammar School, at a cost of £8,000.

The Essex Education Committee has passed plans for extensions at STANFORD-LE-HOPE Council school at a cost of £10,000.

One hundred Council houses have just been completed at WELWYN GARDEN CITY to accommodate the increased number of local workers. As further large factories are being built in the town, including a £100,000 plant on an eleven-acre site for the Norton Grinding Wheel Co., another 200 houses are to be started almost at once.

SOUTHERN COUNTIES

Plans passed by the BEXHILL Corporation: Shops, Marina, for Mr. B. C. Ullyett; two houses, Cooden Drive, for Messrs. Tubbs and Messer; conversion of building into flats, 29 Sea Road, for Mr. E. Bunce; house, Barnhorn Road, for Mr. H. Steward; alterations, "Barrack Hall" and cottages, for Messrs. Underdown and Duke; house, Eastwood Road, for Mr. J. E. Maynard; house, Cooden Drive, for Capt. R. M. Stephens, R.N.; new road and sewers, Glover's Farm, Sidley, for Messrs. Burstow and Hewett; alterations, 6 St. James's Road, for Messrs. Strange and Sons; additions to houses, Barnhorn Road, for Messrs. Virley and Heather.

The BRIGHTON Corporation is to contruct a reservoir at Woodingdean.

The British Home Stores, Ltd., is to erect buildings on the site of 169–174 Western Road, BRIGHTON.

Plans passed by the EASTBOURNE Corporation: Additions, St. Cyprian's School, Summertown Road, for Mr. G. A. Fortescue (architect); switch house, Electricity Works, Roselands, for Messrs. Miller and Selmes, Ltd., on behalf of the Corporation; new bank, junction of Terminus Road and Cornfield Road, additions to clubroom, Downs Golf Club, East Dean Road, alterations and additions, 156 Terminus Road, bank, shop, and flats, junction of Green Street and Chamberlain Road, and additions to bowls pavilion, The Saffrons, for Messrs. P. D. Stonham and Son; two houses, Gorringe Road, for Mr. A. Ford (architect); four houses, Northiam Road, for Mr. W. R. Hamblyn (architect); six houses, Longland Road, for Mr. A. J. Fellows (architect); alterations, 47-49 South Street, for Messrs. G. A. Harmer and Sons; house, Pashley Road, for Messrs. Scales and Baker (architects); warehouse, Ashford Road, for Messrs. C. Brewer and Sons, Ltd.; two houses, Fitzmaurice Avenue, for Mr. A. Ford (architect); depot premises, Moy Avenue, for Shell-Mex, Ltd.; workshop, Fort Road, for Mr. G. E. Holditch (architect); alterations, Feedwell Restaurant, Seaside Road; four houses, Crunden Road, and four houses, Northiam Road, for Mr. W. R. Hamblyn (architect).

The GUILDFORD Corporation is to undertake alterations at the Millmead waterworks, at an estimated cost of £5,000.

The Oxford Corporation is negotiating for land at Horspath Road, COWLEY, for a housing scheme.

The OXFORD Corporation Estates Committee recommends the acquisition of a site on St. Thomas' recreation ground, for the erection of fifty houses.

Plans passed by the OXFORD Corporation: Showroom, Banbury Road, for Messrs. Hartwell's Garages; additions, "Swan" Inn, Marston Street, for the Northampton Brewery; house, Barton Lane, Headington, for Mrs. A. Campin; two houses, Green Road, Headington, for Miss Grant; alterations, "Crown" Inn, Lake Street, for Messrs. A. and G. Simmonds; house, Sandfield Road, Headington, for Manor Estate Co.; two houses, Ashgrove Avenue, Headington, for Mr. H. W. Jacobs; cricket pavilion, Marston, for the Rector and Fellows of Exeter College; house and shop, Quarry Road, for Messrs. F. and E. Watson; additions, Paradise Street, for Messrs. T. Byard and Son; house, Capel Close, Summertown, for Mr. H. Shaw; nine houses, Binswood Avenue, Headington, for Messrs. F. and E. Watson; house, Sandfield Road, Headington, for Mr. A. Lee; house, Capel Close, Summertown, for Mr. E. C. Bradbury; house, Sandfield Road, for Mr. G. B. Rose; house, High Street, Headington, for Mr. W. Beck; two houses, Hawthorn Avenue, for Messrs. Pontin & Co.; two houses, Binsey Lane, for Mr. D. Mealing; house, Divinity Road, for Mr. A. T. Barrett; additions, 11 Queen Street, for Messrs. Queich and Son; additions, Cadena Bakery, Red Lion Square; layout, Abingdon Road Estate, for Messrs. Kingerlee and Son.

SOUTH-WESTERN COUNTIES

The CHELTENHAM Corporation has sold to the County Education Committee a site of four acres of land, for the erection of new premises for the Cheltenham Grammar School.

Plans passed by the CHELTENHAM Corporation: New road and sewers, for Naunton Estates, Ltd.; rebuilding premises, 95 Winchcombe Street, for Messrs. Marks and Spencer; alterations and additions, 119 High Street, for Mr. David Davis; shop, Cirencester Road, Charlton Kings, for Mr. A. Butt; garages, Swindon Road, for Messrs. Martin



First Church of Christ, Scientist, Bournemouth. Designed by W. J. Dacombe. The building is set well back from the main Bournemouth and Christchurch Road, and is approached by a semicircular drive from a pair of wrought-iron gates at either end. The walls are of multicoloured sand-faced bricks, with Portland and Bath stone dressings. The roof is covered with asphalt and pantiles.

Bros.; showroom, Path Road, for Messrs. Reed and Patterson, Ltd.; bungalow, Longwood Farm, for Colonel Aitken.

Plans passed by the TORQUAY Corporation: Bungalow, Wellington Road, for Mr. H. Conway; rebuilding, 5 Cary Parade, for Messrs. Walker; six houses, Carlton Road, for Mr. H. C. Jackman; eight houses, Third Avenue, Daison Estate, for Messrs. L. Lloyd and Son; house, Edginswell, for Mrs. E. Powell; bungalow, Parkhurst Road, for Mr. D. Howard; house, Barnfield Road, Livermead, for Mr. H. J. Burrows; two houses, Leys Road, for Chelston Building Co.; alterations, Avenue Hotel, Belgrave Road, for Mr. E. R. Haarer; house, Hennapyn Hill, for Rev. H. Forster-Morrs; extension to shop, Union Street, for the Maypole Dairy Co., Ltd.

MIDLAND COUNTIES

The DUDLEY Corporation has purchased thirty-nine acres of land at Cradley Road, for housing purposes.

Plans passed by the DUDLEY Corporation: Extensions, King Street, Netherton, for Messrs. Round Bros.; two houses, Recreation Street, Netherton, for Mr. J. E. Watchorn; extension to works, for Messrs. Walker Bros., Ltd.; alterations to Fountain Arcade Café, for Mr. T. W. Tanfield, J.P.; alteration to café to form new flat, Criterion Cinema, for Associated Provincial Picture Houses, Ltd.; factory and office, Stourbridge Road, for Messrs. A. K. Round & Co.; alterations and additions, 72 St. John's Road, for Mr. B. Jones; shops and warehouse, King Street, for Messrs. F. W. Cook, Ltd.

Plans passed by the NORTHAMPTON Corporation: Shop, Vicarage Lane, for Mr. J. Dunkley; six houses, The Drive, for Mr. C. H. Rainbow; house, Duston Road, Duston, for Mr. W. Squires; six houses, The Street, Hardingstone, for Messrs. Ansell and Brown; layout, Kettering Road Estate, for Messrs. H. Martin, Ltd.; two houses and shops, Kingsley Road, for Messrs. Chowns, Ltd.; workshop, Robert Street, for Mr. W. G. White; reconstruction of spectators' stands, Cricket and Football Ground, Abington Avenue, for Northampton Town Football Club, Ltd.; conversion of shop into office, 325 Wellingborough Road, for Northampton Town and County Benefit Building Society; two houses, Ardington Road, for Messrs. Stafford and Agutter; offices, Balmoral Road, for the Advance Motor Manufacturing Co., Ltd.; two houses, Holyrood Road, for Messrs. W. S. Brown and Son; reconstruction of business premises, 58 Gold Street, for Messrs. A. R. and W. Cleaver, Ltd.; extension of shop, 5 Gold Street, for Messrs. G. A. Dunn & Co., Ltd.

The Northants Education Committee has purchased a site for an elementary school at PASSENHAM.

The SMETHWICK Education Committee has approved amended plans of the proposed new secondary school for boys.

The SMETHWICK Corporation has obtained sanction to borrow £10,815, for the erection of the proposed central clinic, and has instructed the borough engineer to commence the work as early as possible.

Plans passed by the SMETHWICK Corporation: New gas showroom, High Street, for the Gas Committee; shops, Bearwood Road, for Mr. J. Myers; eight houses, Heather Road, for the Excelda Housing Society, Ltd.; amended plans of extensions to Soho Foundry, for Messrs. W. and T. Avery, Ltd.; reconstruction of Princes Hall Cinema, High Street, for Mr. E. Hewitson; ten houses, Heather and Hugh Roads, for Messrs. Lloyd Bros.; new inn, Abbey Road, for Messrs. Mitchells and Butlers, Ltd.

Messrs. Shenton Bros. are to erect forty houses in a new road off Milton Road, Sneyd Green, STOKE-ON TRENT.

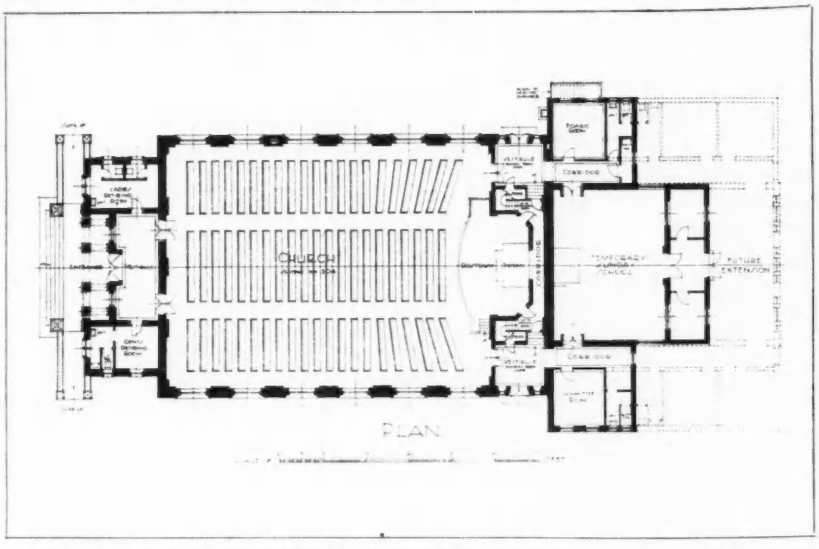
NORTHERN COUNTIES

Plans have been prepared by Mr. E. C. Aldridge, architect to Martins Bank, Ltd., for the erection of a bank at the corner of Bebington Road and Old Chester Road, BIRKENHEAD.

The BIRKENHEAD Corporation Tramways Committee has adopted the plans of the borough surveyor for the reconstruction of the tramways depot at New Ferry, at an estimated cost of £16,000.

Plans passed by the BIRKENHEAD Corporation: Alterations to Regent Picture House, Church Road; two houses, Hesketh Avenue; alterations and additions, Royal Rock Hotel Vaults, Bedford Road; three houses, Albany Road; reconstruction of bank, corner of Upton Road and Scotts Place.

Plans passed by the BOLTON Corporation: Four houses, Crompton Way, for Mr. W. E. Yates; packing store, Hill Mill, Temple Road, for Mr. Henry Crossley; additions to shop, 85 Tonge Moor Road, for Mr. H. Holt; parochial hall, Junction Road, for the trustees of Deane Church; two houses, Regent Road, for Mr. William Reddyhough; generator room, Theatre Royal, Church gate, for Universal Pictures, Ltd.; clubhouse, Scowcroft Street, for Mr. Keith Waler; offices, Manchester Road, for Mr. Wilfred Andrew; extensions, Marsden Road, for Bolton Motor Co., Ltd.; additions, 220 Wigan Road, for Dr. Robert Haslam.



First Church of Christ, Scientist, Bournemouth. Designed by W. J. Dacombe. Ground-floor plan. The church has seating accommodation for over 500 persons, and is provided with cloak-rooms, committee-rooms, boardroom, etc. The paving of the vestibule is of marble, and the floor of the church, which slopes down towards the rostrum, is of pitch pine wood blocks. The walls and ceilings throughout are plastered. Internal woodwork is oak, wax polished.

The HULL Corporation has passed the plans of the city architect for the erection of flats to house 1,108 persons in New George Street.

The HULL Corporation has voted an estimate of £98,000 for the erection of offices and showrooms in New Street, for the electricity department.

The HULL Education Committee recommends the purchase of a site for the erection of new premises for the Grammar School.

The LANCASTER Corporation has decided to erect a new library on a site behind Market Square, at a cost of £14,300.

The LEEDS Corporation Electricity Committee has obtained sanction to borrow £50,000 for the erection of buildings at Kirkstall generating station, and £10,000 for the generating plant.

The MANCHESTER Corporation Town Hall Committee recommends the purchase of land at Alexandra Park for the purposes of a showground and open space, at a cost of £51,310.

The MANCHESTER Corporation has obtained a site on the Moston estate for the erection of public baths.

Plans passed by the MANCHESTER Corporation: Alterations and additions, Wellington Mills, Oldham Road, Newton Heath; vicarage, Rochdale Road, Blackley; synagogue, Bishop Street, Hightown; additions to Albion Inn, Burnage Lane, Burnage; shop and showrooms, 123 Oxford Road, Chorlton-upon-Medlock; additions to brewery, Birch Street and Great Jackson Street, West Gorton; alterations and additions to club, Thornwood Avenue, Gorton; additions to warehouse, Richmond Street, off Princess Street, City; conversion of premises into shops, showrooms and offices, 34-36 Oxford Road, and 2-4 Clarendon Street, Chorlton-upon-Medlock; conversion of premises into film stores and offices, Dickinson Street and St. James's Street; conversion of premises into bank and offices, 354 Ashton New Road and Grey Mare Lane, Bradford; eleven shops and houses, Kingswood Road, Withington; eighty-six houses, off Kingswood Road, Fallowfield; fourteen houses, Wellington Road and Weboner Avenue, Fallowfield; extension to stand accommodation, sports ground, Belle Vue, Hyde Road, Gorton; 478 houses, Briscoe Lane, Newton Heath; additions, St. George's Presbyterian Church, Moston Lane, and Edward Street, Moston; eighty-six houses, Kingswood Road, Leighbrook Drive, Ripon Road, York Avenue, Headingley Road and Hunslet Road, Fallowfield.

Plans passed by the STRETFORD U.D.C.: Nine houses and shop, Lime Road, for Mr. R. P. Wheeler; two houses, Westwood Road, for Messrs. Howard and Waring; alterations and additions, Gorse Hill Hotel, for Messrs. Threlfall's Brewery Co., Ltd.; pattern stores, Trafford Park Road, for Messrs. Royce, Ltd.; canteen and office, Westinghouse Road, for Messrs. Baxendale & Co., Ltd.; extension to works, Low Moss Lane, for Messrs. O. M'Cardell & Co., Ltd.; works, Talbot Road, for Messrs. C. W. Scrouther & Co.

The MANCHESTER Education Committee is to erect an elementary school at Briarfield Road, at a cost of £18,000.

The MANCHESTER Education Committee is to erect a new infants' and junior school, on the Ladybarn Housing Estate, Briarfield Road.

Plans passed by the OLDHAM Corporation: Extension to pavilion, Heron Street, for Hollins Horticultural Society; extension to operating box, Casino Picture House, Neville Street, for Oldham Cinema, Ltd.; house, Hollinwood cemetery, for Oldham Corporation Parks and Cemeteries Committee; alterations to branch store, Lee Street, for the Oldham Industrial Co-operative Society, Ltd.; washhouse, 131 Ward Street, for Mrs. J. T. Harris; alterations and extensions, Black Swan Hotel, Bottom o' th' Moor, for Messrs. J. W. Lees & Co.; sanitary tower to male infirmary block, Poor Law Institution, Rochdale Road, for Oldham Board of Guardians.

The SHEFFIELD Corporation has obtained sanction for a loan of £16,500 for the erection of a depot for the lighting department in Matthew Street.

Plans passed by the SHEFFIELD Corporation: Two houses, Hallam Grange Crescent, for Mr. W. H. Rowan; two houses, Stumperlowe Crescent Road, for Mr. W. Laver; two houses, Dalmore Road, for Messrs. H. and E. Plant; house and branch stores, Hucklow Road, for Brightside and Carbrook Co-operative Society, Ltd.; eighty-eight houses (six with shops), Wybourn Estate, for Sheffield Corporation Estates Committee; six houses, Montrose Road, for Mr. J. Copley; two houses, Haugh Lane, for Mr. G. M. Taylor; four houses, Donnington Road, for Mr. J. C. Mason; seventy-seven houses, Wisewood Estate, for Sheffield Corporation; two houses, Longley Lane, for Mr. A. Oxspring.

The Ministry of Health has held an inquiry into the application of the SHIPLEY U.D.C. to borrow £33,000 for public offices.

SCOTLAND

The GLASGOW Corporation is to erect 210 tenement houses at Pomadie.

The GLASGOW Corporation Housing Committee is to erect fifty-four houses on the Haghill Estate.

The GLASGOW Corporation is to negotiate for the purchase of twenty-three acres of land at Maukinfauld Street, Tollcross, for a re-housing scheme.

The GLASGOW Eastern Co-operative Society, Ltd., is acquiring ground at Lomax Street, Riddrie, for the erection of shops.

The Western Heritable Investment Co., Ltd., is to erect 1,372 dwelling houses at Croftfoot Road, GLASGOW.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_3	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_3	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_3	Atherstone	Mid. Counties	1 5½	1 1
B_3	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_3	Basingstoke	S.W. Counties	1 4	1 0
A_3	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_3	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_3	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_3	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_3	Boston ..	Mid. Counties	1 5½	1 1
A_3	Bournemouth	S. Counties	1 5½	1 1½
B_3	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_3	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_3	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_3	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_3	Brixham ..	S.W. Counties	1 3½	11½
A_3	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_3	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B_2	Chatham ..	S. Counties	1 4½	1 0½
B_1	Chelmsford	E. Counties	1 4½	1 0½
A_3	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_3	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_3	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_3	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_3	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_3	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury ..	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster ..	Yorkshire	1 7	1 2½
B	Dorchester ..	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich ..	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_3	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_3	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_3	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_3	Gosport ..	S. Counties	1 5½	1 1
A_3	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_3	Hastings ..	S. Counties	1 4	1 0
A_3	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_3	Ipswich ..	E. Counties	1 5½	1 1½
B_3	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2¾
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_3	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_3	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_3	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_3	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle ..	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_3	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_3	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_3	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_3	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_3	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_3	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_3	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_3	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_3	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_3	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_3	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
If left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0
Add to the foregoing prices, if in York stone, 35 per cent			
DO. Mansfield, 12½ per cent.			
Deduct for Bath, 33⅓ per cent.			
DO. for Chilmark, 5 per cent.			
SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

	Med. Grey	Med. Green
Portmadoc Ladies	£14 0 0	
Countess	23 0 0	
Duchess	32 10 0	
Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3
Green Randoms, per ton	8 3 9	
Grey-green do., per ton	7 3 9	
Green peggies, 12 in. to 8 in. long, per ton	5 13 9	

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0

WESTMORLAND, in diminishing courses, per square 6 5 0
CORNISH DO., per square 6 3 0
Add, if vertical, per square approx. 0 13 0
Add, if with copper nails, per square approx. 0 2 6
Double course at eaves, per ft. approx. 0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6 7 0	
Grey-green do.	5 9 0	
Green peggies, 12 in. to 8 in. long	4 13 6	

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square 3 17 6
DO., machine-made do., per square 3 7 6
Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0

Memel or Equal. Slightly less than foregoing.

Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube 9 4 6
DO. framed in floors, roofs, etc., per ft. cube 0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube 0 8 6
PITCH PINE, add 33⅓ per cent.

FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅛ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup..	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup..	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour;* MATE, *do.* 1*s.* 3½*d. per hour;* ERECTOR, 1*s.* 8½*d. per hour;* FITTER, 1*s.* 8½*d. per hour;* LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO.. in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour;* MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt..	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour;* LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour;* LABOURER, 1*s.* 3½*d. per hour;* FRENCH POLISHER, 1*s.* 8½*d. per hour;* PAPERHANGER, 1*s.* 7½*d. per hour.*

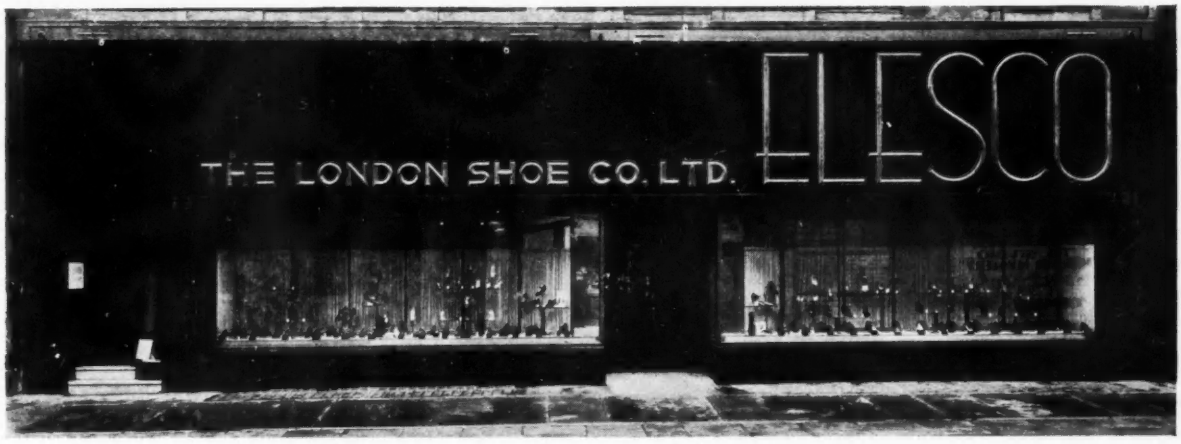
Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	1/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—



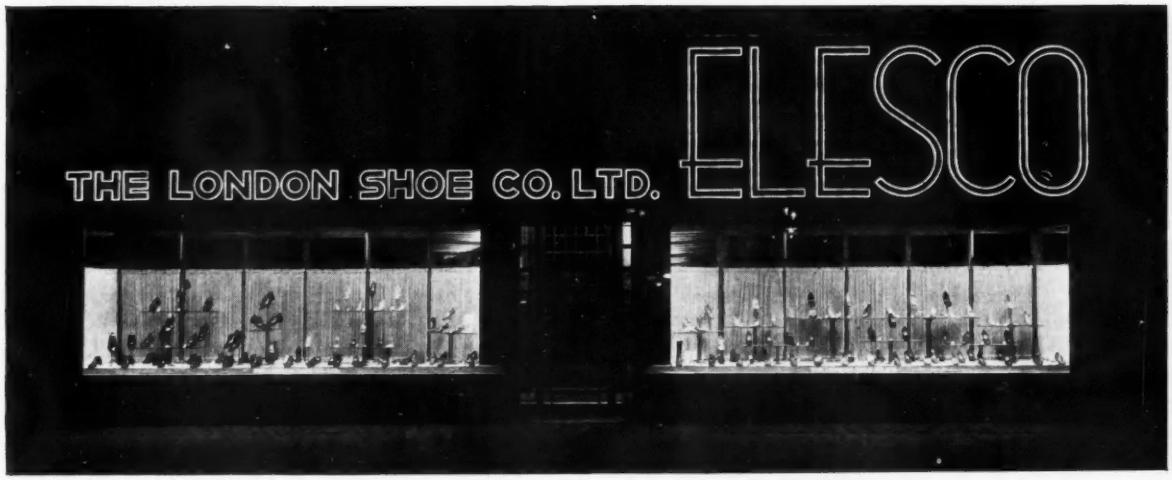
SHOP FRONT : 21-22 SLOANE STREET, S.W.
BY
HENRY TANNER AND SYDNEY JACQUES

THIS shop front, recently completed, to the joint architects' special designs, under their direct supervision, has been carried out in a modern Continental style which is both effective and arresting, whether seen by daylight or after dark.

The plate glass show-windows finish not higher than 7 feet above the footway, and, above them, the wide fascia, in selected blue Belge marble, carries the illuminated day-and-night sign in letters 5 feet 6 inches high, executed in metal and finished in gold bronze.

The metal shop-front is finished in cellulose gold bronze, framed with a bold architrave of black marble. A sun-blind is housed in a case above the marble, and this, also, is of bronze finish.

Within, the entrance lobby is in panelled walnut, with Travertina paving, and an illuminated laylight. The entrance doors are of the portable type, with sliding wings.



Two photographs of the shop front, by day and by night, which illustrate the working drawing reproduced on the following page.

21-22 SLOANE STREET, LONDON, S.W.

Shopfront

By Henry Tanner and Sydney Jacques

(For photographs see preceding page)

THE ARCHITECTS' JOURNAL



WEDNESDAY, MARCH 19, 1930

BOILING POINT

"I have been into many homes in which my blood has boiled at the sight of the arrangement of the house. It was perfectly obvious that the architect had never given a thought to the manner in which the women would have to run them ; there was an utter lack of imagination on the part of the architect. . . . Educated women of today will not tolerate such stupidities."

—MISS MARGARET BONDFIELD, M.P., MINISTER OF LABOUR

THE architect is commonly subjected to a certain complacent type of ridicule that makes him a figure of fun for the practical man. Of this form of humour the joke about " forgetting the stairs " is best known, and most used; though it is being superseded today by one more dangerous and equally futile that would saddle the architect with all the faults of every foolish client, and of every unconscientious jerry-builder of bad villas. This latest gibe might be called the " cupboard " joke. Architects never design enough cupboards; architects never think of women's work; architects never, in short, know the first thing about running a house—a labour-saving house.

It would normally be a waste of time to point out the falseness of an accusation which could never be made with so much impunity were the architect able to defend himself with the same weapons; but for once we must take up arms against a frontal attack so packed with allegations of incompetence, ignorance and hare-brained stupidity as to make *our* blood boil for some form of retort, however inadequate. That the accuser should be Miss Bondfield, M.P., Minister of Labour, and a woman, only adds to the offence.

She, as Minister of Labour, must have given thought to that immense unclassified labour which, as wives and mothers, women are called upon to perform. She has realized the apparent waste of effort which takes unremitting toll of women's life, and how that life is spent in drudgery in and about houses not worthy the name of home. It is a weary thought that this drudgery goes on, with little check—cleaning, dusting, mending and eternal dish-washing.

Thinking of all this, Miss Bondfield wonders why the enormous influence of the building societies could not be directed towards inducing architects to instal labour-saving devices in the houses they design—a very understandable point of view in one unaware of the true financial aspect of building societies or the cost of labour-saving devices. When she proceeds, in public utterance, to accuse the architect of the type of gross incompetence that *adds* more labour to the running of the house, her view becomes unworthy of an observant and educated Minister of the Government, and one may wonder whether, indeed, she has been able to tell when a house is designed by an architect and when not.

For it is exactly in this matter of logical and thoughtful planning of detail that the architect's house is distinguished from the bulk of speculative building, where only those points that help to *sell* the house are thought out and given prominence. Small kitchens made to look labour-saving; large halls that make the house look bigger than it is; sham half-timbered gables that give it a character that it cannot maintain—all these things are paid for by cheap materials, rushed construction and bad workmanship.

If Miss Bondfield will examine the many plans which architects made in the days after the war, when they had some form of control over the houses that were being built, she will see with what care the arrangement of larders, sculleries and living-rooms was worked out to make the greatest use of restricted space, and to catch as much sunlight as possible. She will see also that in these houses attention is paid to other and more lasting aspects of human life; they are built to last several generations and not merely the term of a financial loan. If she will further follow the history of housing, she will see how economic stress pushed out architects from their task of home-building, and how a host of incompetents took their place; and how, slowly but surely, essentials were replaced by attractions, and good design by falseness and pretension. It is, in her, a vexatious and ironical perversion of the truth to saddle architects with what they know is wrong and deplore as fervently as Miss Bondfield can. The science of cheap and good building belongs to architects. The parody that holds the field today will become the slum of the future, because there is so little good in it.

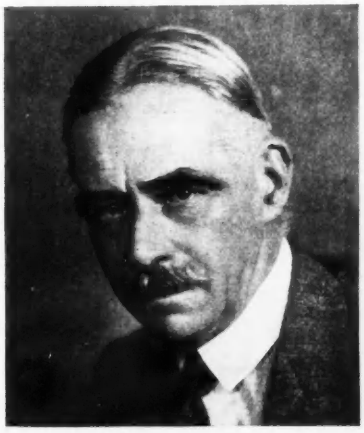
If Miss Bondfield could induce building societies to exercise more than a financial control over the money they lend, there might be some chance for the knowledge and brains of architects to be used once again to good purpose.



EXCAVATOR, CONCRETOR AND STEEL ERECTOR

A photograph of the foundations, the retaining wall, and the grillage, for the sub-basement of Thames House, Grosvenor Road, S.W., in course of erection from the designs of Sir Frank Baines, K.C.V.O. The retaining wall is 36 feet high, 16 feet wide at base, and 4 feet at top. Twenty-eight cranes, excavators and other appliances were employed in constructing the foundations. 110,000 yards cube of earth were excavated, and 17,670 yards cube of concrete were used in constructing the retaining wall. The building will have a river frontage of 560 feet and a height from sub-basement to ridge of 164 feet.

NEWS & TOPICS



Dr. Percy Scott Worthington, M.A. (Oxon.), the recipient on Monday last of the 1930 Royal Gold Medal. A collection of drawings and photographs of Dr. Worthington's architectural work is on exhibition at the R.I.B.A. until March 29.

WHERE HOUSING HAS BROKEN DOWN

WE have for some time been avoiding the problem of housing the enormous population lying outside the economic rental figure. In spite of the million houses built since the war, it is known that we have only satisfied those capable of paying a rental of over ten shillings a week, and that a much larger section of the community is living in the slums which have not been touched, or is existing under great stress in houses which they cannot afford.

★

The situation has been exposed by *The Hull Evening News* in an article that makes very disagreeable reading for everyone who has looked upon municipal housing as one of the things which, in a difficult period, has been fairly well done. According to this article, the state of some of the city housing schemes borders on a poverty which we have never associated with wide roads, gardens and well-planned houses; and yet if one may believe that in the past year 11,000 summonses have been served in one estate alone, and that houses are to be had in plenty by those who can afford the rent, one may ask whether indeed one class of the community is not already completely catered for, while another is without any other refuge but an overcrowded slum. That this situation is not confined to Hull, I have the evidence of an omnibus driver, who remarked to me, as we passed the L.C.C. Roehampton estate, which I was praising to a friend, " the only thing wrong with that place is that the people who live there can't afford to."

TAXING ART EXPORTS

Mr. Alfred Bossom has suggested a new tax to Mr. Snowden—a tax on exported art treasures. The idea is not exactly new, for the recent Rural Amenities Bill contained a clause forbidding the export of old buildings. Mr. Bossom goes one better, for he purposes to tax all art treasures leaving the country, and to use the money so raised to restore and preserve what remains. Mr. Snowden might have known there was a snag somewhere. It would be hard if he accepted the first part of the suggestion and pocketed the rest.

A LONDON STEELWORK " HUSTLE "

I understand that the speed with which work is proceeding on Thames House, Sir Frank Baines's new office building in Grosvenor Road, Westminster, is without precedent in the building trade. The steel frame, which will weigh nearly 12,000 tons when complete, is being erected at an average rate of over 400 tons per week by means of eight cranes concentrated on the site. During one week no less than 1,080 tons of steel were fixed, constituting a record for the country, and easily beating the previous record of 680 tons in one week, at Empire Hall, Olympia. Thames House will be the largest office building in London. Horseferry Road and the widened extension of Millbank along Grosvenor Road will shortly become two of the main traffic arteries of the metropolis; thus the new site, instead of being separated from the river by a jumble of old wharves, will front upon a great embankment roadway 70 feet wide.

VANISHING TRICKS AT THE TROC.

Some interesting steelwork is also being erected at the Trocadero Restaurant, Piccadilly Circus, where extensive alterations are in progress from designs of Mr. F. J. Wills and Mr. Oliver P. Bernard. A week or so ago I saw a braced girder, which is believed to be the biggest of its type in London. It is 70 feet long, 14 feet 6 inches deep, and weighs 62 tons. Its top flange is at fifth floor level, and its bottom flange at fourth floor level, and access to the kitchens on the fourth floor is obtained by a door in the girder itself. Owing to difficulties of access, some of the large plate girders and framed members had to be delivered " piece small " and riveted up on the site. I also saw there a " dropping screen," built on a lattice steel girder 66 feet long and 15 feet high. It separates two rooms, each capable of accommodating 250 diners, and can be made at will to sink through the floor, complete with all lighting, decorations and doors, thus converting the two dining-rooms into one large hall. Surely this electrically controlled wall constitutes one of the most remarkable interior construction jobs ever carried out in this country.

MR. EVERYMAN AS HOME DESIGNER

One of the by-products of " home making " journalism is to be seen in a steady stream of fatuity directed to convince the gullible reader that architecture is child's play. All you do, according to one particularly bright article, is to think of all the things you would like, and then have your ideas " incorporated into a workable plan that satisfies sanitary and other legal requirements *by an architect*." Were we ever brought so low as this ! Yet, when I think of it, under the terms of this gratuitous insult a large proportion of very useful work is carried out. And I have known the insult to be most handsomely withdrawn. After all, no one can be more insulting than the light-hearted press, poor fellows !

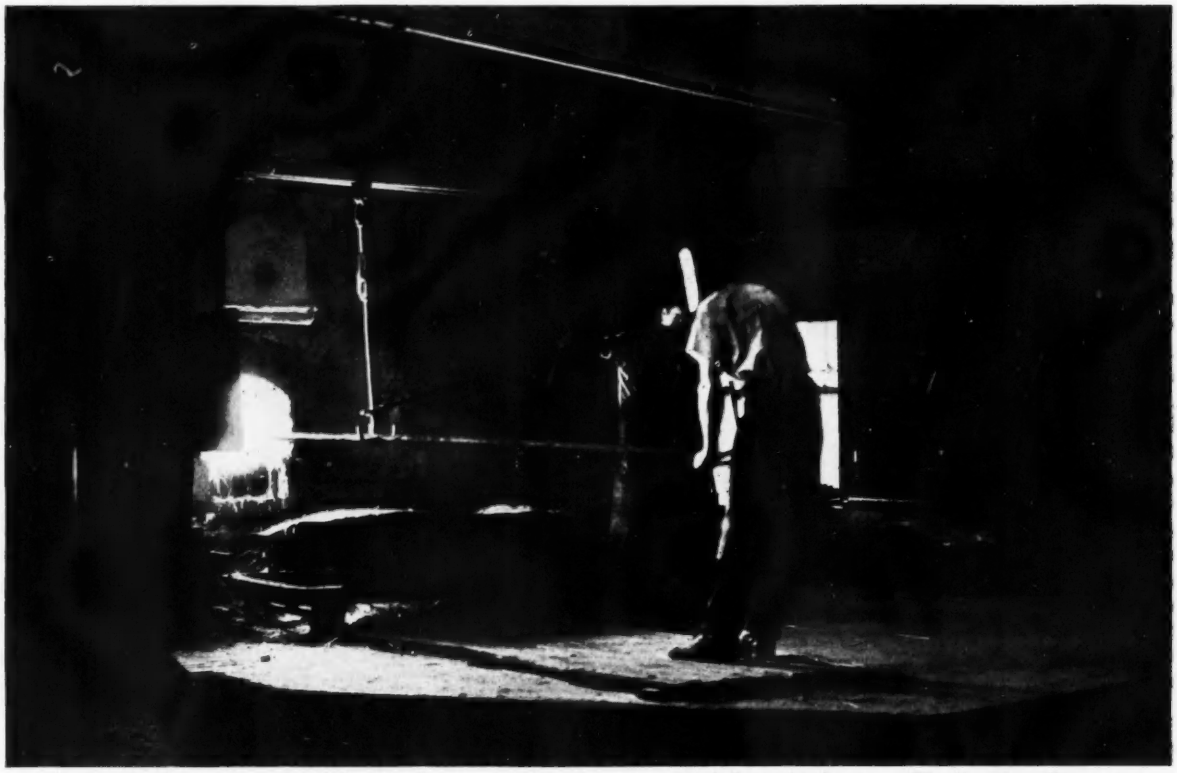
HEAVY TRAFFIC THROUGH OXFORD

Traffic through Oxford has increased to such an extent that fears are entertained for the safety of some of the older college buildings. The ordinary traffic which one associates with a university town could never be considered dangerous, and one realizes how much Oxford is transformed into the semblance of a twentieth-century industrial town, that latest manifestation of progress in the South of England, when the complaint is chiefly directed against heavy traffic. It is suggested that a public inquiry be held to discover the true bearing of the problem, and, if the Road Traffic Bill is passed with some important amendments, it may be possible that such an inquiry might lead to certain streets being closed to heavy traffic where

universities, colleges or other ancient monuments are rendered liable to the dangerous effects of vibration.

WHO GIVETH EYES TO SCIENCE

Ever shall I bear about me a memory of my introduction, in company with a party of London architects, into the secrets of glass-making at Smethwick, Birmingham, on Wednesday last. With an indefinable sense of awe I watched the "gatherers" drawing molten metal from the furnaces for the making of rolled plate-glass. They wore metal masks over their faces to protect them from the intense heat: metal masks with dark glass eye-holes to enable them to see into the blinding glow of the furnaces.



A stage in the making of rolled plate-glass: drawing the molten metal from the furnace. The "gatherer" wears a metal mask to protect him and enable him to see into the brilliant glow of the furnace.

As we roamed from place to place, I saw glass of the finest kinds for decorative and practical purposes. I saw white-hot metal, tortured into motion by the breath of the human glass blowers, struggling fitfully as it settled into the shapely bed of its mould. But I shall not attempt to describe my feelings as I saw the production of Crown glass, with its bullions, its brilliant surface and its slight "bow," by the same process which was employed in the sixteenth century: amazement was predominant. I believe it is here, at Chance's, and in no other place in the world, that this process is now employed.

THE "CLAMEUR DE HARO."

Some architects might be embarrassed if the ancient Norman custom of "crying for justice," which is still recognized in the Channel Islands, were enforced in Great Britain. By this custom any wronged person can cry aloud, "Haro! Haro! come to my help." Recently a Mr. Machon was annoyed because the scaffolding of a building next door overhung his rose-bushes. He complained that his flowers were being covered with plaster. As the foreman refused to remove the scaffolding, Mr. Machon raised the "clameur de Haro." The case was eventually taken into the Royal Court of Guernsey, and it was agreed that the foreman, by his refusal to remove the scaffolding, had risked a breach of the peace. A nominal fine of one shilling was inflicted.

"IN A FINE FRENZY," ETC.

I cull some flowers of rhetoric from a painter's own foreword: These Landscapes, Flowerpieces, Portraits and Still-Life Studies are meant to be receptacles for holding a much more important treasure: my Rapture. Let me unfold the meaning of this. The sight of an object—a scene, a face, or a flower—may affect me somehow. I do not snatch at the opportunity of interpreting this impression into a picture and becoming famous. I merely enjoy a certain emotion, which more often than not fades away. But sometimes it lingers within me and lives. It works like leaven and creates an unrest and an urge to express something. This is my first joy. The nursing of an idea, the kindling of an emotion, the passionate love-work of creating a picture in one's mind. As a result of this, I feel (not labour or think) all I want to know about the decorative handling and grouping, the tonality, the design and the technique. . . . Then I am ready to make use of my perception of the object. . . . My work is not of the nature of a hardship. It is hurried, and feverishly pursued. Needless to say, it is ever an intense struggle, but fought under glorious excitement. . . . If I can smite you with some of the rapture which has been mine during the time of activity of each picture, then I may derive from this fact an increase of delight and enjoyment.

How lo-ovely!

ASTRAGAL

PROBATIONERS' TRAINING SCHOOL

Novel Unit at University College Hospital, W.C.

DESIGNED BY MICHAEL WATERHOUSE



A view of the front to Huntley Street, carried out in red brick, with dressings and two decorative sculptured tablets of a book and a dove in stone, and wrought iron balcony, etc. The new building adjoins the nurses' home, seen on the left, the old servants' entrance of which has been utilized to serve the new premises. A drawing of the elevation appears on page 460.

TODAY, March 19, has been appointed for the opening, by Prince George, of a unit in the complex organization of a modern hospital that is particularly interesting and novel in character. This is the preliminary training school for probationers at University College Hospital.

It has been appreciated for some time past, by those interested in the training of nurses, that it would be beneficial both to the pupils and the

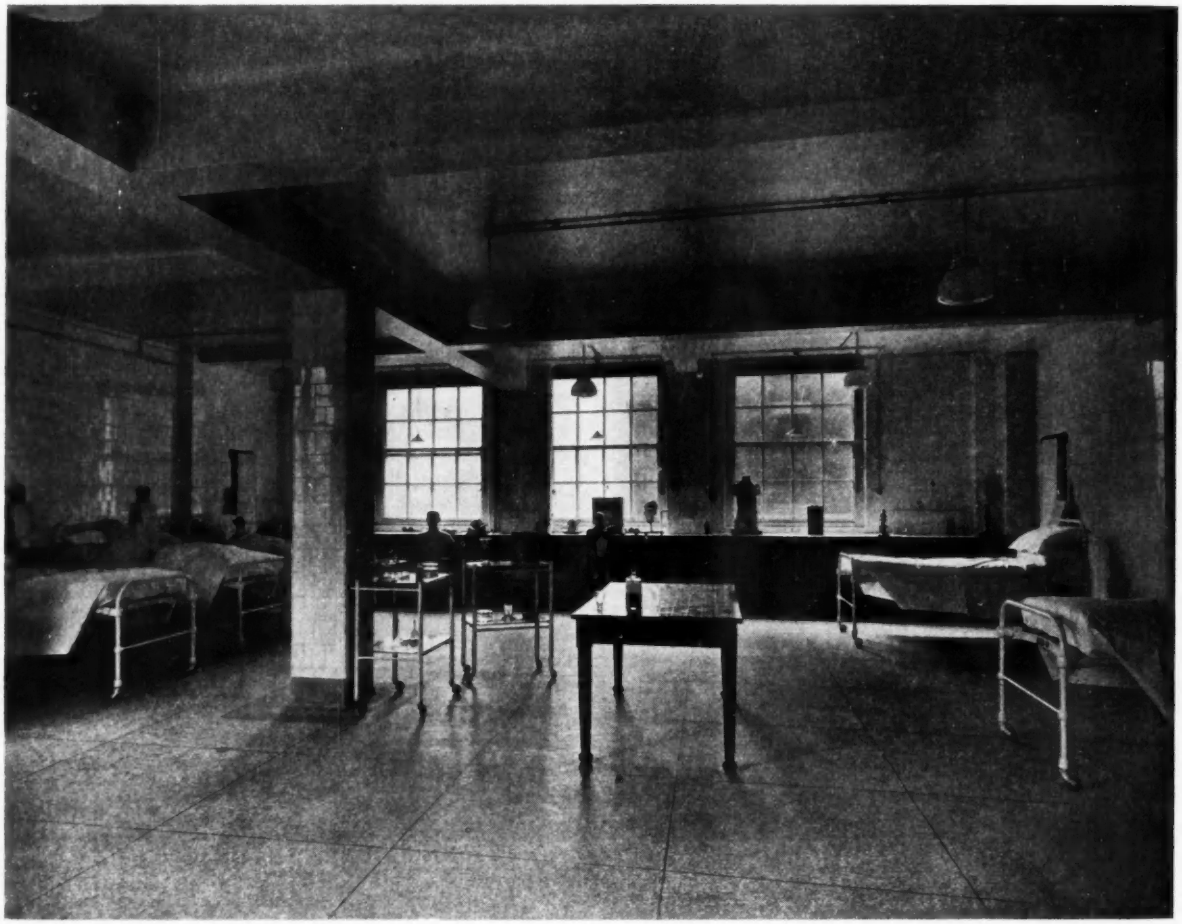
teaching staff if they could be separated from the general life of the nursing staff. If the probationers and their teaching staff can be placed in a separate building closely adjoining the hospital and nurses' home, and this building can be fully equipped with all the necessary practical rooms and apparatus for demonstration, then teaching can be carried out without having to use either the hospital wards or the rooms of the general nurses' home for the earlier stages of training. Very few hospitals in this country are fortunate enough to have either the means or the accommodation for this ideal arrangement. It has, however, been made possible for the University College Hospital by the wise generosity of the Rockefeller Trustees. The cost of the preliminary training school, which has been built to the designs of Michael Waterhouse, is some £27,000, and is being defrayed by the Trustees in their desire to complete in the best possible manner their earlier gifts which have done so much to enlarge and reconstruct this hospital.

The site for this new building, which adjoins the new nurses' home in Huntley Street, designed by the late Paul Waterhouse, father of the present architect, has been provided by the generous gift of the Misses Paxton, in memory of the late Dr. Francis Valentine Paxton. It has a frontage to Huntley Street of 33 ft. and a depth along Hills Place of 62 ft., and is of irregular shape, thus presenting many problems. A compact and economical plan has been contrived, with a maximum of light and accommodation and a minimum of waste space in stairs and corridors.

The building has its own separate entrance—in effect, the old servants' entrance of the nurses' home—and staircase, and is quite independent of the nurses' home, though through communication is provided for use as and when desired. It contains dining- and sitting-room accommodation, demonstration rooms, lecture rooms, and bedrooms for twenty-one probationers and their teaching staff, numbering three, divided between a basement, ground floor, and six stories above.

The basement contains, on the front, a well-lit and very well-equipped training kitchen, with tiled-top benches, gas stoves, sinks, etc., all of the most modern type. Adjoining this is a scullery and cold storage, all these being designed for training purposes and not for the cooking of students' meals. At the back is the probationers' dining-room, with its own pantry and servery; the food for this room is provided from the general kitchen of the nurses' home, which connects through the servery.

On the ground floor is the entry, with



Probationers' School, University College Hospital, W.C. [*By Michael Waterhouse.*

In the practical room, on the first floor, looking towards the front windows of the building. The outstanding feature of the school is the detailed nature of the equipment; this is, practically, a model ward, with demonstration beds and benches, sinks, etc. No human patients, however, will occupy it: only figures, for practice in bandaging, and life-size dolls, two of which may be discerned in the beds on the left.

its hall and office, and, adjoining this, on the Huntley Street front, is the probationers' sitting-room. At the rear is the large lecture-room, lit from Hills Place and equipped with lecture table, screens, boards, and large cupboards for demonstration models. The whole of these ground-floor rooms are panelled in Oregon pine, and the dining-room in oak; and these, in common with the bedrooms and bed-sitting-rooms, are designed to appear comfortable and home-like and form a contrast to the usual " hospital " type of architecture.

On the first floor advantage has been taken of the old archway over Hills Place to extend the large practical demonstration room along the whole frontage and also to secure back light from Hills Place. The practical room, with its adjoining sink-room, has been made as large as possible and is fitted as a model ward, with the addition of laboratory sinks and benches round the walls, for all branches of training. The sink-room is an exact copy of those in the hospital and, generally speaking, all equipment has been so arranged, selected and designed that it will give the students practical experience with the apparatus that they will either find in the University College Hospital wards or ought to find in the wards of any other up-to-date hospital to which they may go.

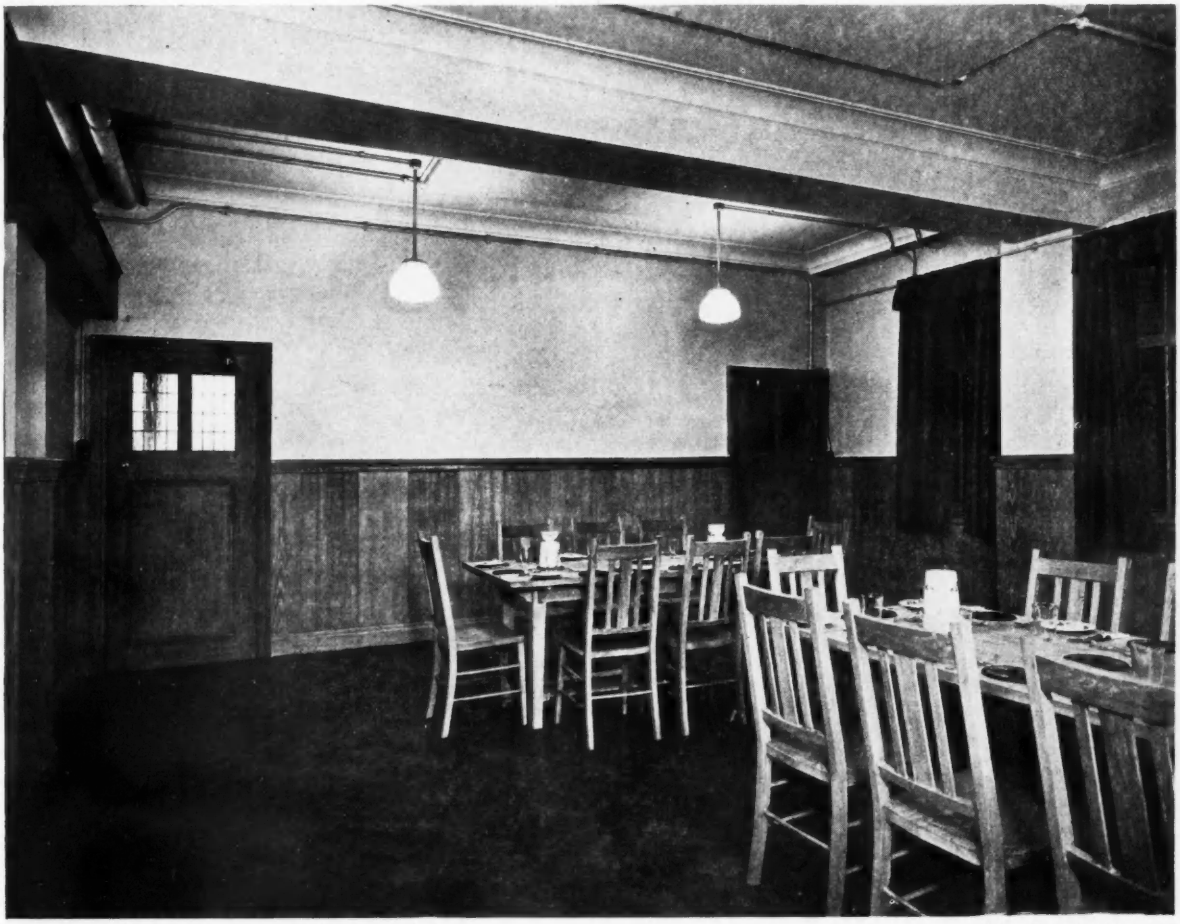
The second floor is devoted to the teaching staff, and consists of two sitting-rooms, one bed-sitting-room, and two bedrooms, with their own bath and lavatory accommodation, linen-rooms, and boxrooms. The average size of the sitting-rooms is 208 sq. ft., the bed-sitting-room, 210 sq. ft., and of the bedrooms, 140 sq. ft.

The third, fourth and fifth floors are all alike, each containing bedrooms of an average size of 125 sq. ft., all fitted with built-in wardrobes and cupboards and fixed lavatory basins, with hot and cold water; each floor has its own bath and lavatory accommodation and its box and linen rooms.

The sixth floor is built to accommodate ten maids of the general hospital staff, and is connected with the servants' quarters of the nurses' home, being distinct from the preliminary training school.

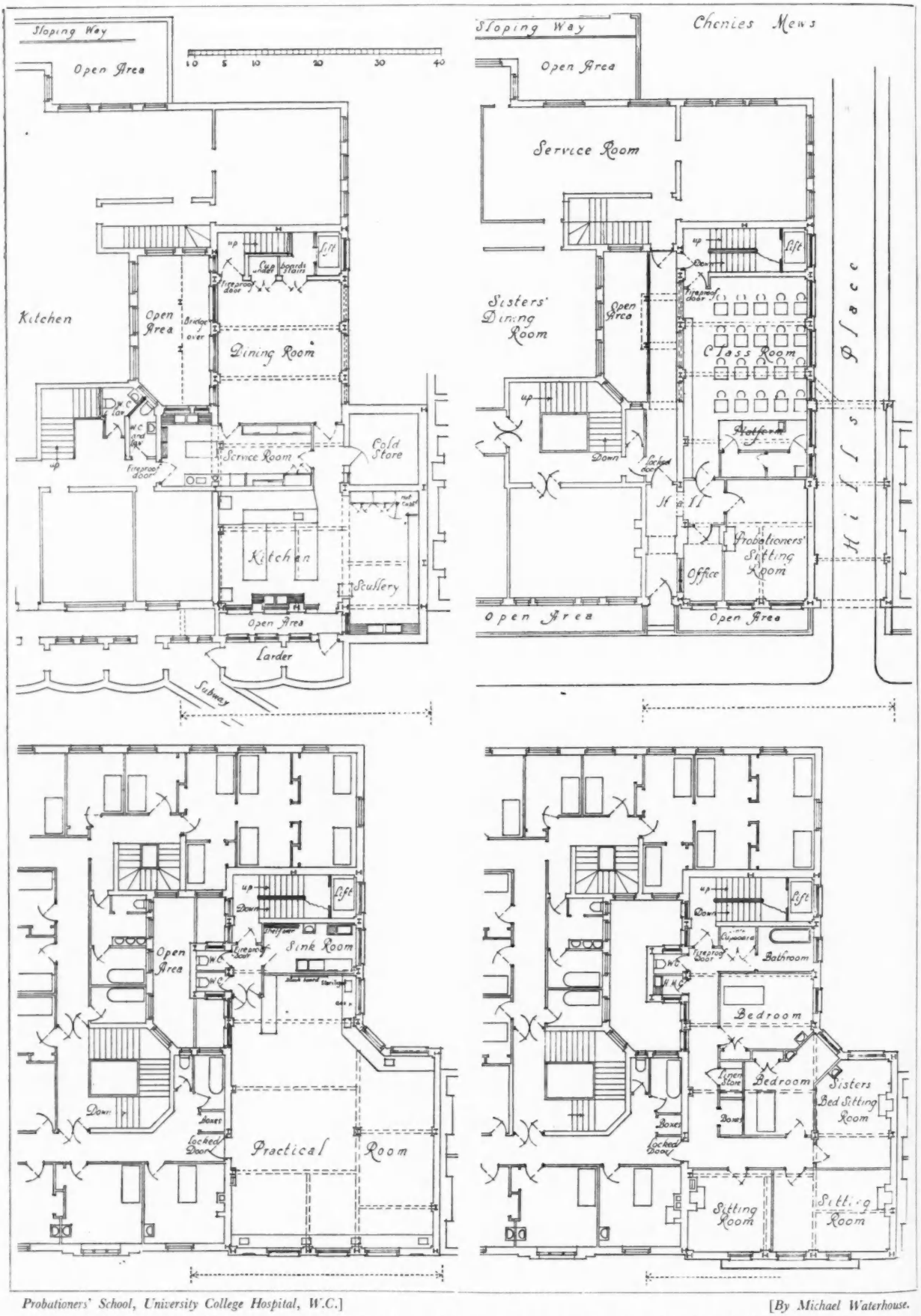
The building has its own lift and staircase, and is heated by low-pressure hot water from the central boiler-house of the hospital. In addition, there are fireplaces, adapted for either coal or gas, in the public rooms, sitting-rooms and bed-sitting-rooms.

The exterior, of red brick and Portland stone, has a very distinctive character, while at the same time it harmonizes with the other hospital buildings in the street and particularly with the adjoining nurses' home.



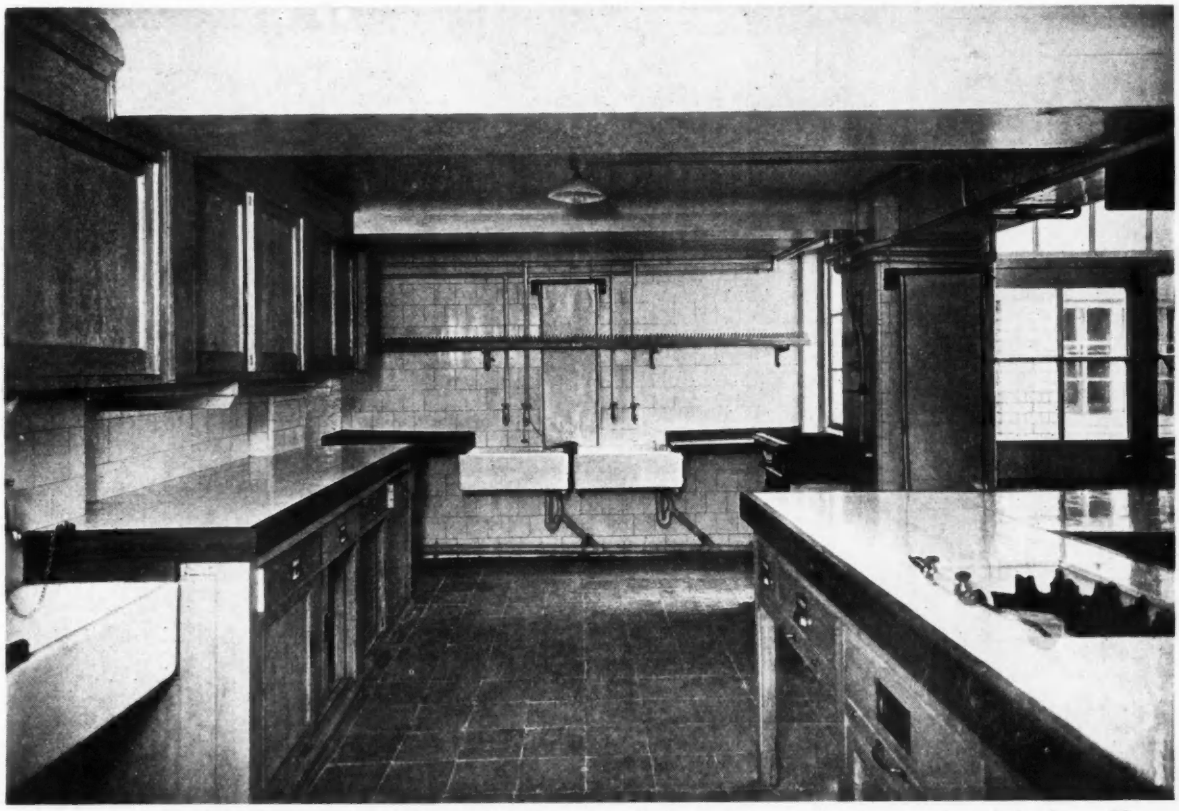
Probationers' School, University College Hospital, W.C.] [*By Michael Waterhouse.*

The probationers' dining-room, in the basement, is panelled and furnished in oak, and has its own pantry and servery. The ood served is cooked in the general kitchen of the nurses' home, in the adjoining building, not in the demonstration kitchen of the school itself, of which illustrations are reproduced on page 459. This room is typical of the aim, held throughout the school, to make the domestic quarters home-like.

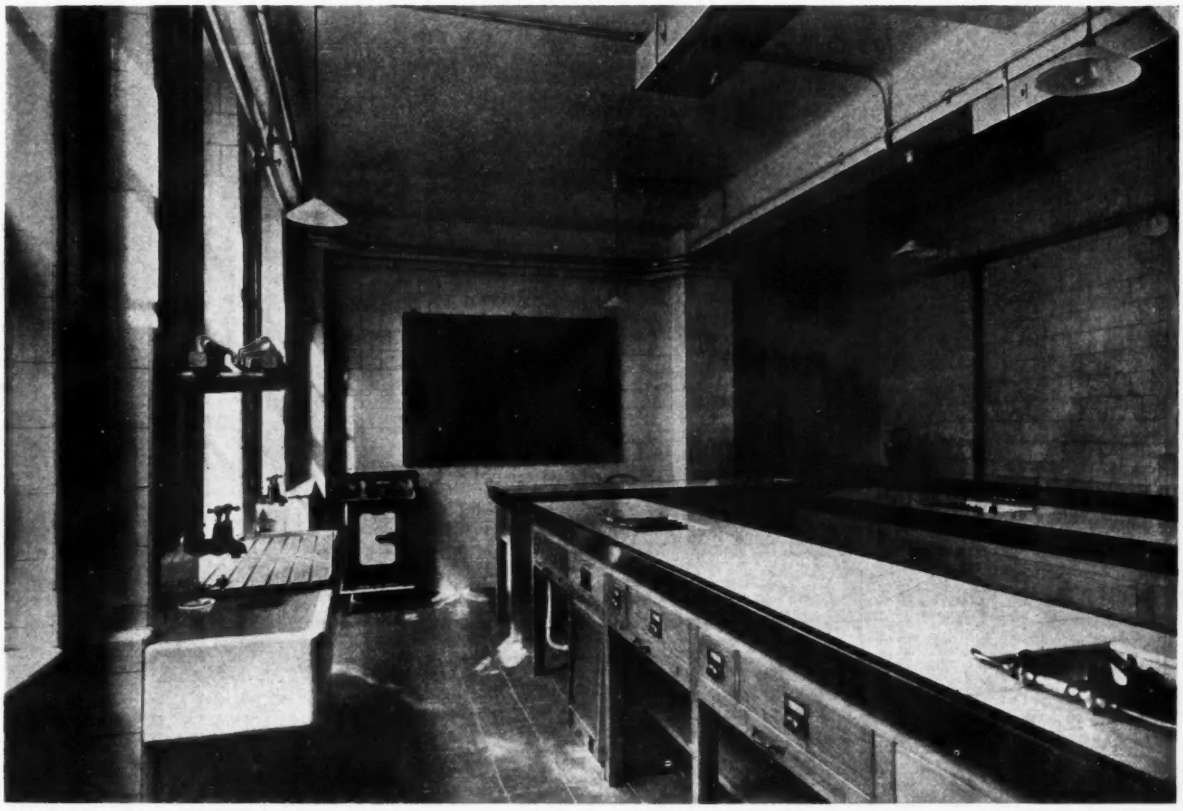


Probationers' School, University College Hospital, W.C.] [*By Michael Waterhouse.*

The architect's plans of basement, ground, first and second floors, respectively. The third, fourth and fifth floors are devoted to sleeping accommodation, and follow the general lines of the second. The dotted lines indicate the limits of the new building.

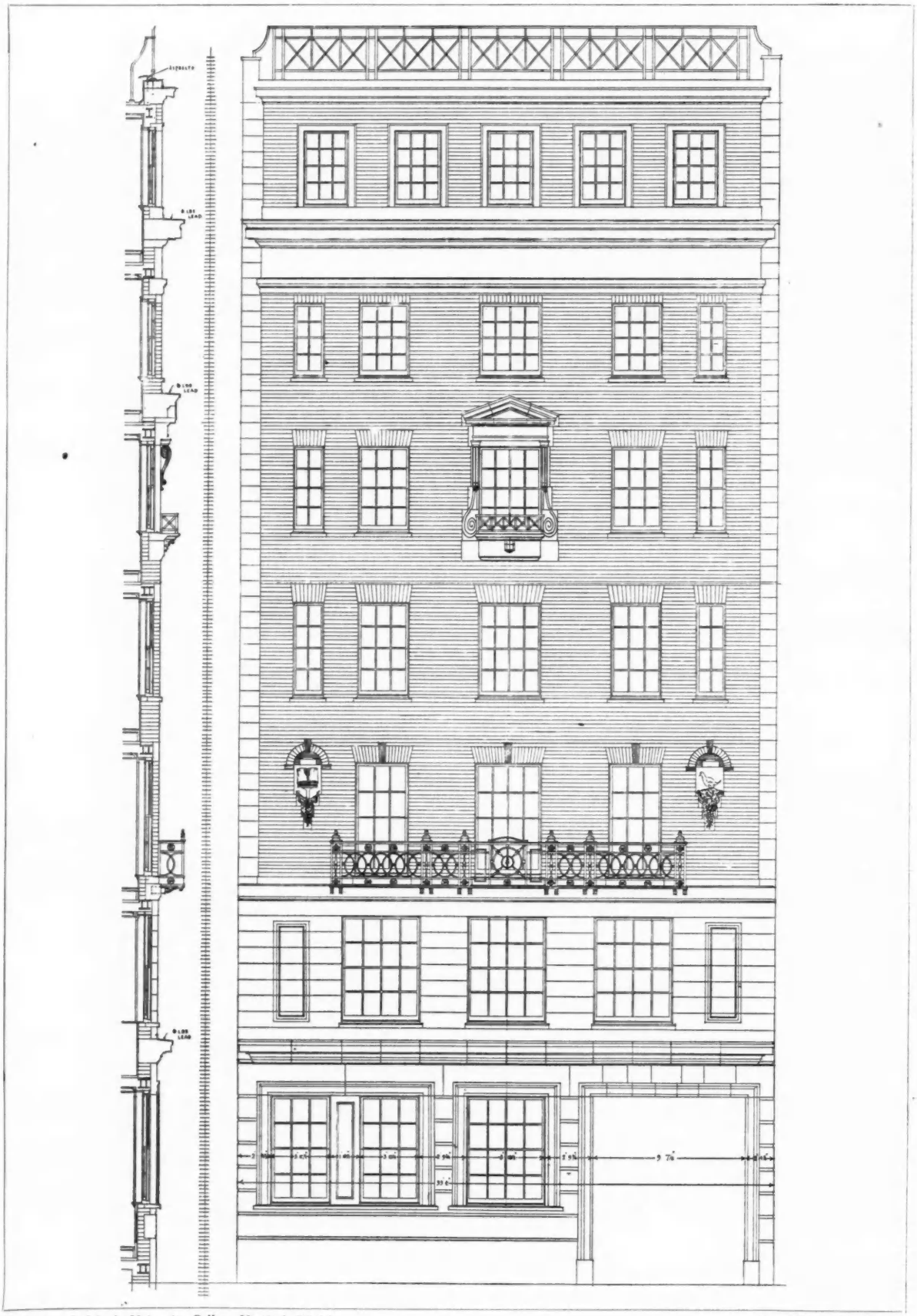


The scullery end of the demonstration kitchen, in the basement; the larder is across the open area beyond the door. The benches, with tops of white tiles, recessed gas-rings, and cupboards and drawers beneath, were made by the general contractors.



Probationers' School, University College Hospital, W.C.] *[By Michael Waterhouse.*

At one end of the kitchen is a blackboard, with two gas cookers within easy reach, for demonstration purposes. The plate racks over the washing-up sinks, seen on the left, like other metal fixtures and pipes, have been given an aluminium finish.



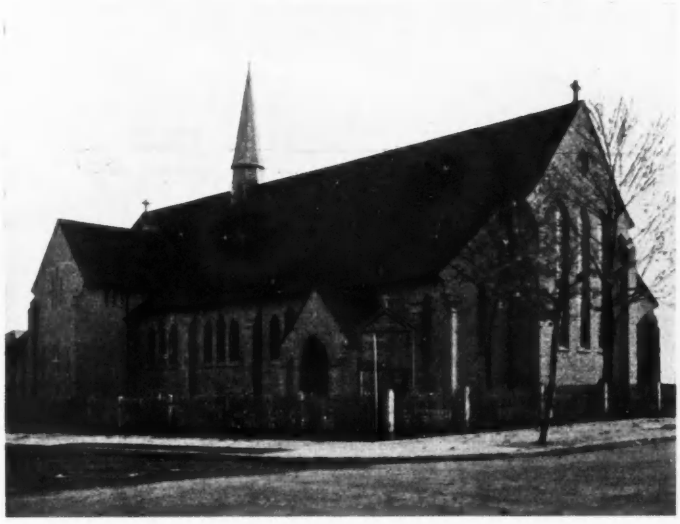
Probationers' School, University College Hospital, W.C. [*By Michael Waterhouse.*

The architect's detail drawing of the front elevation, of which a photograph appears on page 455. The scale may be gauged from the chart of the brick courses that divides the elevation from the section, shown to the left: a division equals three inches.

ALL SAINTS' CHURCH, EAST SHEEN, SURREY

In Brick and Tiles

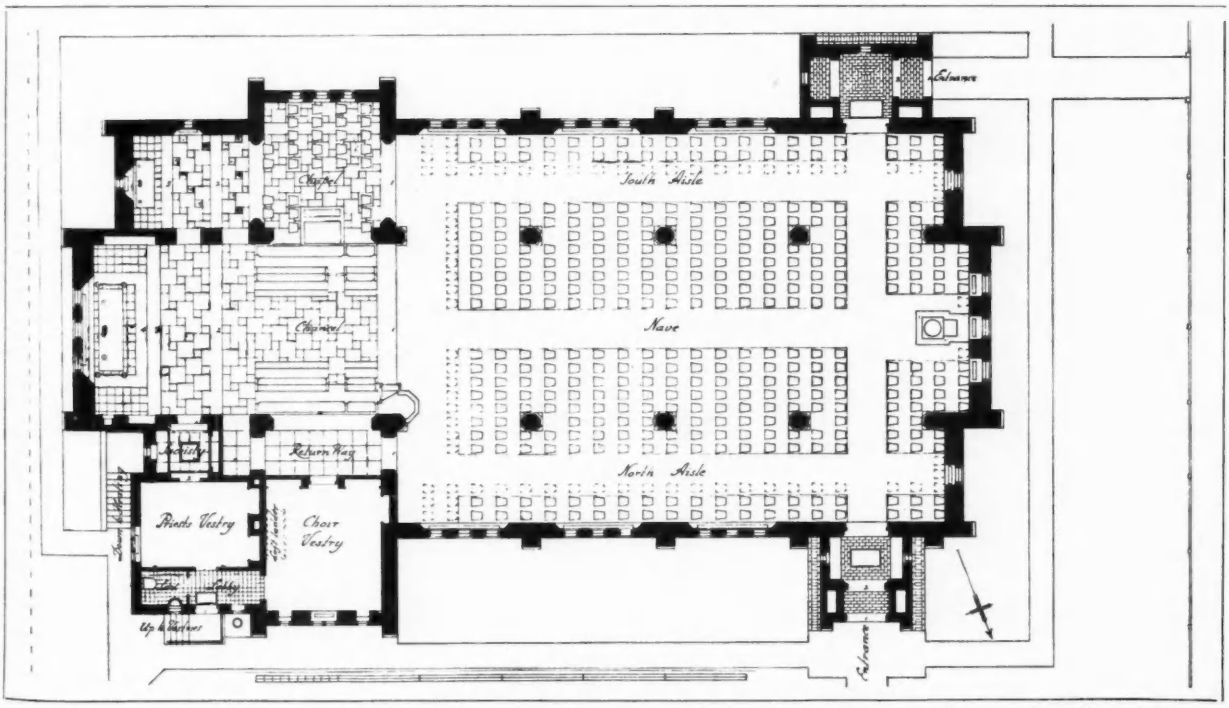
DESIGNED BY NEWBERRY & FOWLER



A general view taken from the corner of Park Avenue (left) and East Sheen Avenue. The church is built of hand-made multicoloured facing bricks, and covered with thick roofing tiles carefully selected for their colour and texture.

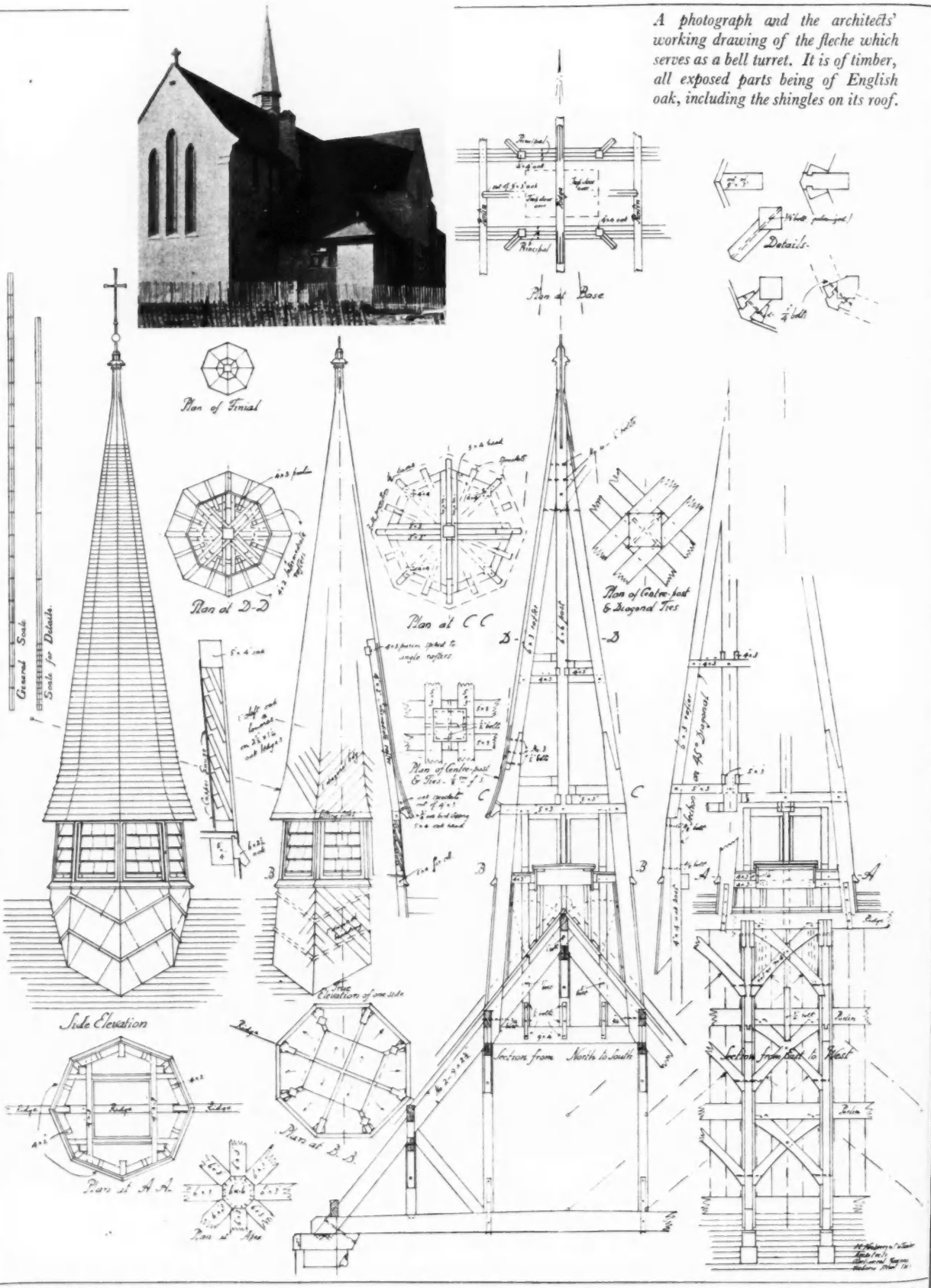
THE site of All Saints' Church is approximately 211 ft. long by 110 ft. wide, and has roads on three sides—East Sheen Avenue on the west, Park Avenue on the north, and Park Drive on the east. On part of the site, to the east of the church, will eventually be built a parish hall or parsonage house. The exterior relies for its architectural character upon the simple and effective use of materials of pleasant texture and varied colour. Hand-made multicoloured facing bricks, with wide mortar joints; and thick roofing tiles, were used. The cost of the building being about double what it would have been before the war, when the scheme for building this church was first originated, and the difficulty of obtaining funds being greater, it was necessary to design the building as economically as possible, consistent with a proper regard for dignity, proportion and stability.

In order to obtain the greatest effect of height and space for the least expenditure of money, the nave, chancel and aisles are narrow, the walls as lofty as is compatible with stability, and the roofs simply constructed with tie-beam principals. There is no clerestory, but a single roof spans the naves and aisles, and nave and chancel roofs are continuous from end to end, there being no chancel arch. The building is designed in the Early English style, freely adapted to modern requirements and materials. A characteristic feature is the plain pointed arch or lancet window, with its simplicity and absence of tracery, and this type of window is found throughout the building.

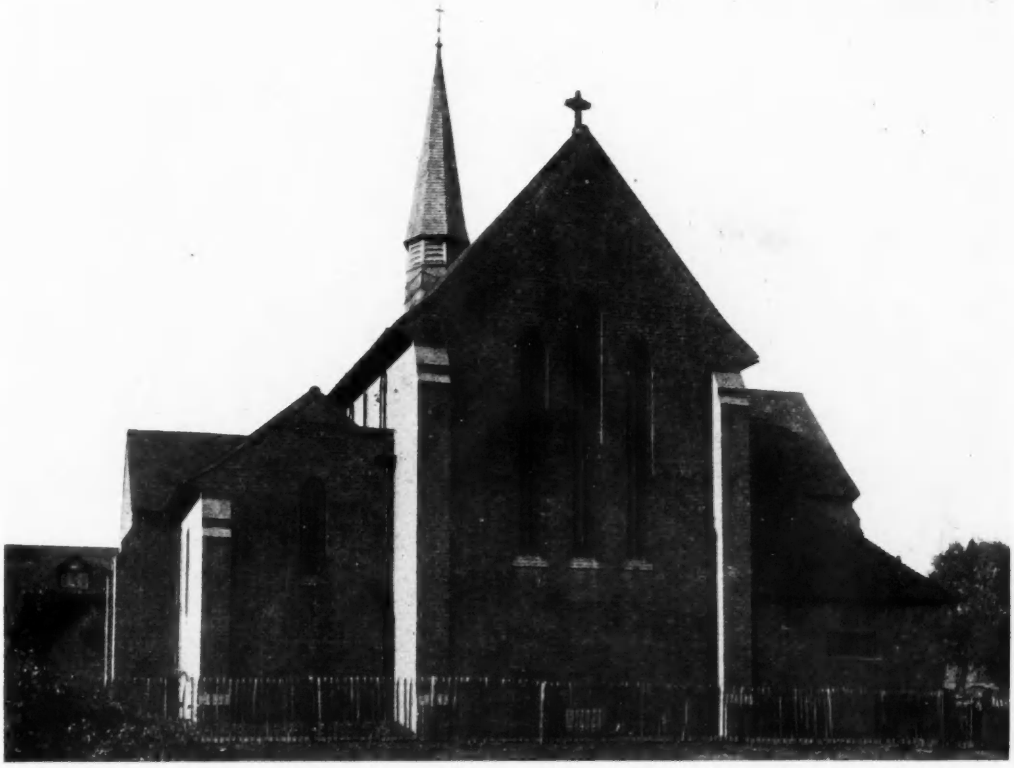


The church consists of a nave and four wide bays with north and south aisles, and accommodates 526 persons, including 36 in the choir and 36 in the chapel, which balances the choir vestry on plan.

A photograph and the architects' working drawing of the fleche which serves as a bell turret. It is of timber, all exposed parts being of English oak, including the shingles on its roof.



All Saints Church, E. Sheen, Surrey.] [*By Newberry and Fowler.*



This photograph of the east end shows four of the lancet windows which have been made a characteristic feature of the elevations. They are of brick, designed in a simple manner, without tracery.



All Saints' Church, E. Sheen, Surrey.] [*By Newberry and Fowler.*

The west end and entrance from East Sheen Avenue. As will be seen from the plan on page 461, there are two main entrances to the church, the other being on the north side, from Park Avenue.

The building consists of a nave and four bays, with north and south aisles, accommodating 526 persons. The chancel is the same width as the nave, and the chapel opens out of it on the south side, whilst on the north there are the choir and priests' vestries, a small sacristy, and a spacious organ chamber above a return way for communicants, as well as an entrance lobby and lavatories.

A lofty flêche springing athwart the main ridge marks the junction of the nave and chancel, serves as a bell turret, and gives a note of verticality to the whole composition. It is constructed of timber, and all parts that are exposed to the weather are of English oak, including the shingles on its roof.

The latest type of electro-pneumatic organ has been installed, which allows the organ to be placed in the loft provided, whilst the organist can operate from a detached console placed on the south side of the chancel, the connection between the organ and console being made by a small cable of electric wires under the chancel floor. Access to the organ loft is provided for by a "loft ladder" in the choir vestry.

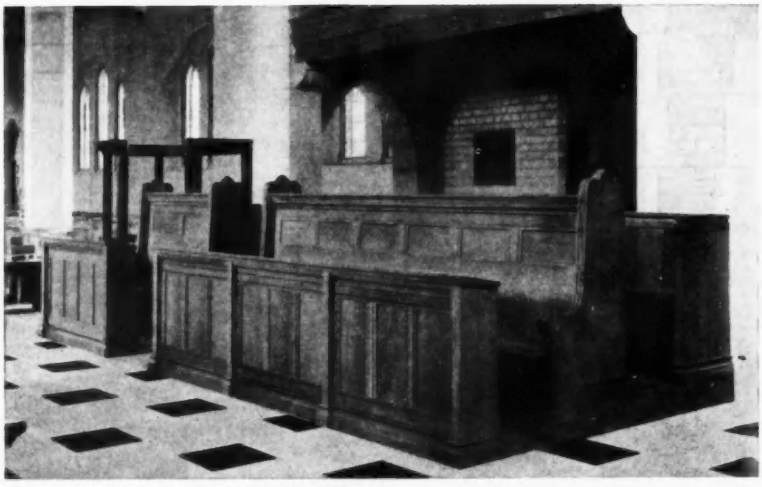
The windows are formed entirely of brick, with their inner sills of red quarry tiles. The roofs throughout are of Columbian pine, also the doors in the vestries. The vestry windows and external doors are of English oak, as are also the porch doors.

The church is heated by a low-pressure hot-water system, with heaters concealed in wide air flues under the windows. Cold air enters these flues through grilles near the floor; is warmed by the heaters, which consist of pipes and fins of copper, and passes into the church through another grille in the window sill. Natural ventilation is provided by iron casements in the windows and by openings in the gables. The church is lighted by shaded electric lamps concealed in the roofs; and the vestries, etc., are provided with pendants.

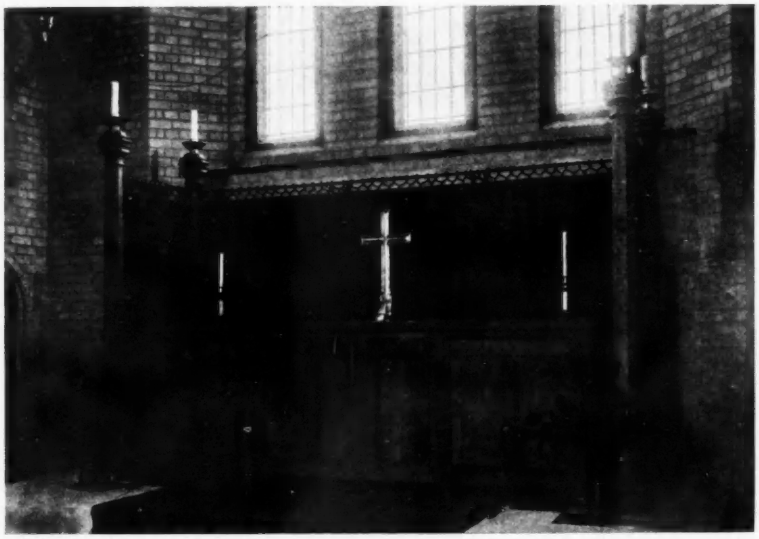
The foundation stone is in the outside eastern wall of the chancel and was laid by the Duchess of York. The cost of the building, excluding the organ, amounted to about £11,500.



View of the chapel, taken from the sanctuary. It seats 36, and accommodates the organ console. The church is lighted by electric lamps concealed in the roofs, as seen.

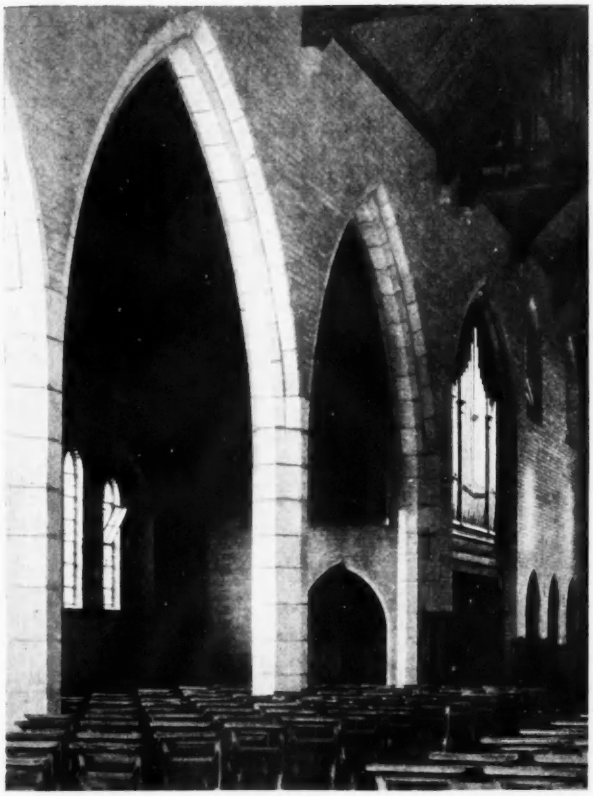


The choir stalls are of unstained English oak. The chancel floor is of Portland stone and slate. The pulpit, a temporary one, was formerly in St. Mary's, Sanderstead.

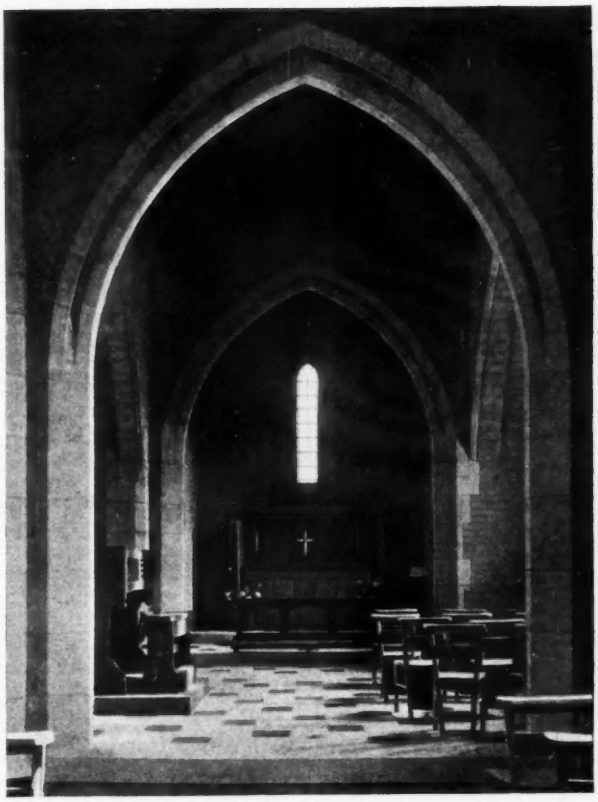


All Saints' Church, E. Sheen, Surrey. [*By Newberry and Fowler.*

The altar, of simple design, carried out in unstained English oak, and the altar cross and candlesticks, of pewter, were made from the architects' designs.



North side of chancel, showing organ chamber over choir vestry. The organ console is in the chapel opposite organ loft.



Chapel on south side of chancel. The floor is of Portland stone and slate, and arches and responds are of Bath stone.



All Saints' Church, E. Sheen, Surrey.] [*By Newberry and Fowler*

The east end. The nave and chancel roofs are continuous from end to end. There is no chancel arch, but a lofty fleche marks the junction of the nave and chancel, and serves as a bell turret. (*See also page 462.*)

SEA SALT AS A CAUSE OF THE DECAY OF LIMESTONE

BY ARTHUR R. WARNES AND D. NORTHALL-LAURIE

WHILST it is common knowledge that the air in proximity to the sea is frequently charged with sea spray, and in consequence contains material quantities of sodium chloride and the other salts present in sea water, yet it is not generally known to what great distances inland salt of marine origin is carried. Atmospherically-carried sodium chloride has been found in places well up to the watershed near the northern parts of Britain, at a great distance inland in Gloucestershire, owing to heavy south-westerly gales blowing up the Bristol Channel, at Rothamstead, and at many other inland places in the British Isles.

The action of small and, in many cases, gradually increasing quantities of salt is undoubtedly deleterious to stone, even though slow, and in our opinion insufficient notice has been taken of such action; at times the decay attributed to sulphur acids or their salts has been partly due to sodium chloride. The rapid manner in which salt spray becomes deposited upon outlying structures through being carried in the air by strong gales, in the absence of rain, has been the cause of the breakdown in the dielectric capacity of high tension insulators which are now being used to such a great extent throughout the country in connection with the distribution of high-tension electricity by overland conductors. When only low voltages were employed for distributing electric current across country, the margin of safety of the insulators was sufficiently high for any deposition upon them of a conductor, such as salt, to be without effect on the efficiency of the system, but as the voltages used have been increased of late years to a very high degree (the distribution under the grid system being at a pressure of 110,000 volts) the deposition of salt upon the insulators supporting the conductors carrying these high voltages has become a very serious problem.

Although the grid system has only been installed for a comparatively few miles up to the time of writing, yet serious breakdowns have already occurred as the result of sea spray being carried during the heavy gales in winter.

We have drawn attention to these troubles from salt incurred by the electrical industry merely to indicate that sea salt is definitely carried inland, not only for short but for long distances, in material quantities, in spite of the statements which have been made by certain individuals that such a phenomenon was impossible.

One of us (A. R. W.) called attention to localized decay in Portland stone by sea salt in 1926[1] and gave brief explanations of possible ways in which this substance acted. We had occasion lately to investigate a case of serious deterioration of the surface of portions of Portland stone ashlar on a building which had been erected less than six months. The stone, before fixing and after cleaning down, appeared in perfect condition, and it had been selected for the work on account of the importance of the building. It was therefore extremely disappointing to the firm who erected it that, in spite of the fact that unusual care had been taken to select the stone, portions of it should have failed so quickly.

A large number of samples of the decayed stone and also undecayed stone, bedding mortar and soil were taken, and exhaustive analyses made upon them. It seemed impossible that the stone should have decayed in places through any local atmospheric agency in the short time in which it had been exposed at the place of erection, and we were forced to the conclusion that there must have been a cause for the decay existing in the stone previously to its being prepared for the work.

Analytical examinations indicated the presence of small quantities of calcium sulphate and magnesium sulphate, but what was extremely interesting was the fact that the bedding mortar contiguous to the stone which had become decayed contained material quantities of chlorine, present as sodium chloride, whereas in the bedding mortar contiguous to the undecayed stone there was a mere trace.

There are three possible ways in which the salt could have got into the stone and mortar, namely, by contamination with urine, from the soil, or from sea water; and the analytical data, when carefully considered, indicated that the first two theories were untenable. This left sea water, probably in the form of spray, as being the only likely cause for the presence of the salt.

The origin of this salt was then investigated, and from the following considerations there is no doubt left in our minds that the stone had become contaminated at some time or another, either directly with sea water or indirectly through spray being carried to it by wind from the sea. If the geographical position of the quarry faces of the beds of Portland stone on the island of Portland is noted, it cannot but be apparent that those beds are exposed to weather conditions under which they must become contaminated with salt, and the same may be said of blocks of stone lying in the quarries. It is a fact, moreover, that some of the low-lying quarries are actually subjected to direct contact with sea water in stormy times, and it is of interest to draw attention to the fact that as lately as February 1 the sea made a breach in the Chesil Beach at Portland, flooding a considerable area.

Random blocks of stone, when removed to the mason's yard, and after sawing and dressing for use, might appear perfectly sound, and in many cases would remain sound for years; but it must be remembered that Portland stone, in common with other sedimentary rocks used as building stone, is not homogeneous in its physical composition. We refer more especially to its porosity, which porosity has been defined as " capillary head."

Our explanation of the decay of certain portions of the stone which had become contaminated with sea water is that the sodium chloride or salt concentrates in those portions of the stone exhibiting a higher capillary head than contiguous portions.

The salt collecting in the interstices acts in two ways: (a) in presence of water it hydrolyses slightly and then dissolves portions of and ultimately loosens the calcium carbonate or calcite binding material of the stone; (b) it crystallizes, and in so doing exerts a pressure on the fine particles, rupturing the weakened binding material and resulting in surface disintegration.

In regard to action (a), experiments have shown that calcium carbonate is more soluble in solutions of sodium chloride than in water.

In regard to action (b), experiments carried out by the Building Research Department on repeated crystallizations of salts in stone have led to the disruption of the samples as a result of the crystallization. In our very extensive practice we have found the same results in the laboratory and *in the field.*

A bedding mortar composed of Portland cement, or lime and stone dust, often has a very high capillary head, and we would expect that a stone which contained portions in which salt had concentrated, on being placed in juxtaposition to such a bedding mortar, would allow the salt to travel from it to the mortar and therefore the mortar would in time contain a high percentage of salt. Such a condition we found to be the case when investigating the decay of the stone above mentioned, and from a consideration of all the facts obtainable we are of the opinion that much of the decay noticed had been caused in the first place by the presence of salt derived from the sea.

[1] See *Building Stones, their Properties, Decay and Preservation*, p. 184.



ENGLISH PRECEDENT No. 107

HOUSES,
CHURCH STREET,
WARWICK

Converted into a free library and club, this building, of the local stone, though much perished, shows a finely proportioned front of the mid-eighteenth century. The stone urns count for much in the general effect. It is probably the work of "Smith of Warwick," who designed the Court House there in 1730, following the Palladian mansion of Stoneleigh.

Since the photograph was taken, the front has been faced with a patent cement, and, with only four of the eight urns replaced, has lost much of its character.

—[C. M. C. ARMSTRONG.]

CORRESPONDENCE

CHARING CROSS BRIDGE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—" Ponderivo's " letter (issue of March 5) leaves a curious impression on the mind and a bad taste in the mouth. In his endeavour to prove that all is for the best in the best of all possible worlds he does not scruple to juggle with facts, nor to misrepresent the views of those whom he seeks to admonish. It is, of course, very difficult to meet, on a ground of surmise, one who represents that he not only knows of the drawings which Sir Edwin Lutyens is going to produce in the by-and-by, but understands his mind and can marshal his ideas.

The rest of the architectural world knows only a few facts. We know that Sir Edwin Lutyens was called in to dress a skeleton ready prepared by the engineers, and it is false to say that " he completely recast the scheme . . . in detail." We can only guess the length of time he had upon it before he left for India, during which, to " Pondivero's " surprise, " he appears actually to have walked down his streets "; we know nothing of the architectural possibilities which this unborn drawing is to reveal to us. We do know that in public no one voice has been raised in support of the design; and we are able of our own knowledge to deny that " it is a triumph of civic design." We also know that Sir Edwin Lutyens took a private letter, written in good faith by a friend, and handed it to an expert in the art of parliamentary debate, in the course of which all sorts of constructions were put upon it.

I am not a member of the Institute, but having had the honour of serving on committees which meet within its walls, I can bear tribute to the single-mindedness with which the members have approached this question, and especially to the artistic fidelity with which Mr. Arthur Keen has discharged his duties as chairman.

" Sir Edwin's plan is so right in scale," says " Ponderivo." Well, what is Sir Edwin's plan ? Why is it we have not yet seen it? Is Sir Edwin responsible for putting 1,400 ft. of roadway into tunnel ? Are the ramps and the viaducts the product of his genius ? " Ponderivo's " talk about " the gulf which separates " our " thought from that of Sir Edwin Lutyens " is merely as foolish as it is vulgar.

Whether it is better for traffic to debouch near the Embankment, where it is at once split up into five or six lines of direction, or to plunge direct into the overcrowded Strand is a matter of opinion, but the Committee have certainly taken no sides in the matter. " Ponderivo " ignores entirely the fact that the Committee of Engineers reported against the present position of the railway station, and I refuse to accept the position that any railway company shall be able to dictate to the world's metropolis.

And does " Ponderivo " seriously mean that the Surrey side doesn't matter? The scheme condemns it to a maze of tunnels, viaducts and embankments, and apparently this has been done purposely so that Sir Edwin can exercise his genius upon it. Where are the noble building sites we hear about? The plan does not reveal ONE.

" Ponderivo " seems to know as little about town planning as about traffic requirements. How futile, how insufferably foolish, it is to complain of large-scale planning ! Piecemeal planning is what London is suffering from today ; it opens to most potent criticism the little-mindedness of the official scheme. Here a little, there a little; no generous gesture; no considered whole. More than anything in regard to London's growth we need a co-ordinated scheme of improvements for the next fifty years at least. " Ponderivo " must have spent his time in a classroom : where does he find, in actual schemes, these axial lines and circles he talks about ?

Sir Edwin's genius does not require the additional attribute of a necromancer : it is patent, gladly acknowledged. And when an anonymous writer tells us in advance of all the architectural glories that are going to be done, and be done by Sir Edwin, will he tell us also how he has faked the issue and doped the judges in advance ? For we have the specific undertaking that these things shall be the subject of an open competition.

If it takes an aeroplane to appreciate the plan of those curious town planners among whom " Ponderivo " lives, what sort of hextry-double-magnifying kind of glasses does it require to sort out the few grains of wheat from " Ponderivo's " desert of chaff ?

EWART G. CULPIN,
President, the Incorporated Association of Architects ; Member, the Town Planning Institute.

THE ÆSTHETIC FRONT

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Mr. A. Trystan Edwards shows less respect for himself than I did. I deplore that he should not keep faith with his readers, and ascribe to me a wish to restrict the freedom of architecture when it was his own advocacy of such restriction that I deprecated.

H. B. CRESWELL

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—With reference to the above letter, in my reply to Mr. Creswell, published in your issue of March 12, there was no sentence that attributed to him " a wish to restrict the freedom of architecture," nor was there, in either of my two articles on Registration, a single sentence advocating such a restriction. But your readers are doubtless capable of forming their own opinions as to which of us has misrepresented the other.

A. TRYSTAN EDWARDS

CLEANING OAK FURNITURE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—In your JOURNAL for January 29 last J.C.R. advises a querist to clean off his weather-stained furniture, which he says " is best done with glasspaper and a cabinet scraper." In point of fact, a scraper should never be used on oak. The " figure " or " flower " of this wood runs across the grain, and is far harder than the unfigured portions of the timber. A scraper will scoop out these softer portions, leaving the " flower " untouched; and the result will be a most unsightly succession of ridges and depressions which could only be removed by planing. The only method of cleaning off oak is to use glasspaper or any similar abrasive. Should the furniture be stained in places or unevenly weathered, a better result might be obtained by bleaching with a solution of oxalic acid, glasspapering to remove the raised grain, and oiling with raw linseed oil. Yet, in the case of exposure to the elements for several months, the weathering has probably penetrated to such a depth that only planing could restore the creamy-white surface that the furniture bore when new. Under these circumstances, the querist had better make the best of a bad job; and lightly glasspapering his furniture, oil it. The colour when oiled should be a light golden brown.

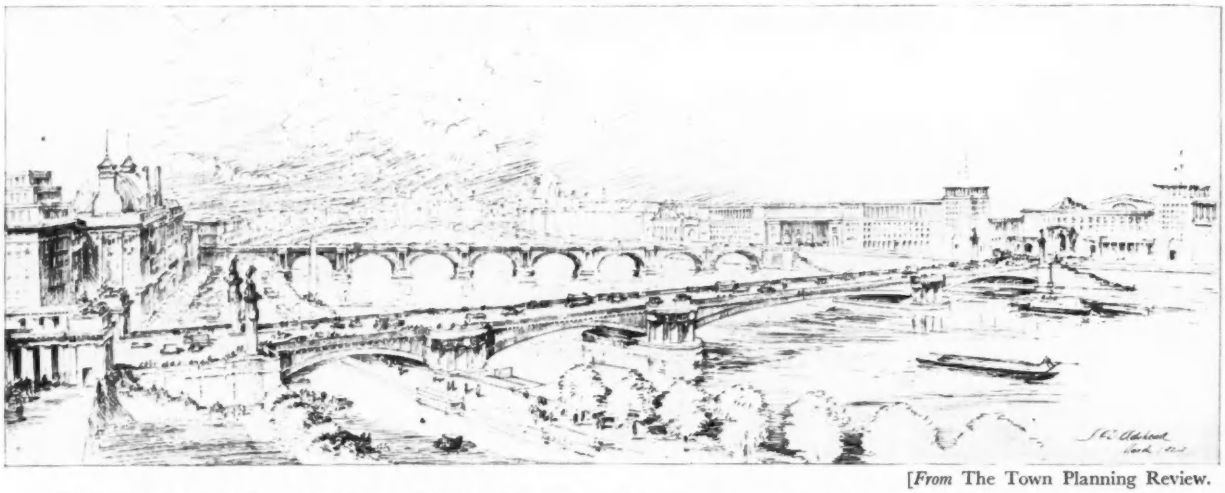
There is one other matter. The use of scrapers is not confined to " plain, flush surfaces," since chairmakers use a " scraper-spokeshave " when finishing cabriole and similar chair legs.

THOMAS FOSTER

[The above letter has been submitted to our expert, and we print his reply below.]

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—There may be a rule amongst purists that " a scraper should never



[*From* The Town Planning Review.

Perspective sketch of Professor S. D. Adshead's scheme, viewed from the north shore of the river, looking eastwards towards St. Paul's Cathedral. It indicates the direct way in which the proposed new station would be approached from the bridge.

be used upon oak," but it is a dogmatic statement to which in practice there are many exceptions. The fact that the silver grain is far harder than the unfigured portions I considered too well known to mention, and the use of the scraper upon strongly-figured surfaces, of course, needs skill and care. I can imagine exceptional pieces of Austrian oak where it would be difficult though not impossible, hence my cautionary remark in the reply to your querist. Not all oak used in furniture, however, is strongly figured, much, in fact, is cut at an angle with the medullary rays, and upon such surfaces the scraper will act perfectly. Properly used, it is an exaggeration to state that the "scraper will scoop out these softer portions leaving the flower untouched." It is true the softer grain will respond more readily and that after careful scraping, if the fingers be passed over the surface in some cases, the larger markings of the silver grain can be felt standing ever so slightly above the softer tissues; but to produce "a most unsightly succession of ridges and depressions" is to visualize very brutal treatment indeed, such as I have never experienced.

I never hesitate to use the scraper on oak where the job can be best done by so doing. In my opinion, judicious scraping of quarter-cut oak surfaces enhances rather than spoils the effect, for it produces conditions similar to those present on old oak furniture, where by the process of time the soft tissues have shrunk, leaving the hard silver grain slightly prominent: for which the old pieces are much admired.

The use of glasspaper alone involves a very lengthy and tedious job, and, if too vigorously and unevenly applied, can certainly cause undulations; moreover, there is always the temptation to use too coarse a grade, by which the amateur can seriously score and scratch the surfaces, which is a disfigurement, and can only be rectified by a scraper or finely set plane. The use of a plane is practically limited to the top in the case of existing furniture; it is useless on panels, and little can be done with it on rails and stiles and drawer fronts, whereas the scraper searches all corners and short lengths and, properly sharpened, will cut both hard and soft tissues.

As regards restoring the tone, the use of linseed oil is out of the question; the natural colour of oak was desired, whereas oiling gives a yellowish tone which is unpleasant.

With regard to your correspondent's last remark, I think I was entitled to assume that your querist was not in possession of the full equipment of a cabinet- and chair-making establishment, for had he been he would also have possessed the knowledge for which he wrote. Assuming it was the inquiry of an amateur I gave the method of cleaning up turned—and, of course, cabriole — legs, which is safe and effective.

J. C. R.

LITERATURE

TOWN PLANNING REVIEW:
DECEMBER, 1929

IT is one of the invigorating qualities of the *Town Planning Review* that it keeps always before it the consciousness that the practice of town planning is as much an art as a social service, and that this side of its nature is the more permanent, and in the end therefore the more important. It is for this reason, if my diagnosis is right, that the review of current work, and the discussion of current problems, is blended with the study of the best work of the past. Looking through back numbers, one is reminded again and again that the problems that beset us today are old problems reappearing, and that the principles of the art are deductions from the study of what has been good in the past.

Since principles are too often forgotten under stress of immediate necessity, this element of real scholarship, which gives so fine a flavour to the pages of this magazine, should be regarded as a really valuable contribution to town planning.

The December number gives pride of place to a thorough examination of the various schemes for a Charing Cross Bridge, which were exhibited recently at the London Museum. Mr. Trystan Edwards, while dealing with each scheme impartially, points out the, I think, acknowledged virtues of that submitted by Professor S. D. Adshead. He also urges the importance of a competition, or a series of competitions, covering the whole range of reconstruction of both the bridge and the banks, and both from the standpoint of the town planner and the architect.

There follows a description of a competition for the replanning of the town of Foggia, in Southern Italy, an absorbingly interesting series of plans.

Housing problems in the U.S.A. are discussed in a rambling and rather indecisive article by Mr. Lawrence Veiller: one learns that housing in the States is good, bad and indifferent, but mostly indifferent. Then comes a close study of a fresco, in the Vatican Library, of a bird's-eye view of Rome at the end of the sixteenth century, with excellent book reviews concluding the number.

E. M. F.

The Town Planning Review. December, 1929. The Journal of the Department of Civic Design, School of Architecture, University of Liverpool.

ARCHITECTURE AND THE CHILD AT SCHOOL

IT is significant of the acceptance of architecture as one of the vital affairs of everyday life that this little book on *Foundations of Architecture* should be written not merely for the adult but for "a child at the secondary school stage." It is still more significant that it should be designed not simply to give a novel form of entertainment for the child, but as a guide for the teacher or scout leader whose own knowledge of architecture and building is not yet sufficient to cope with the needs of this new activity towards the inculcation of the principles of citizenship.

In the introduction Professor Reilly reminds the reader that "there is no escape from buildings . . . from the earliest times man has used them as a means of expression. . . . No community today, either by cunning or carelessness, can escape making a similar manifestation of its true self." The authors' aim is not only to stimulate curiosity as to existing buildings but also to contribute to the education of those responsible for the buildings of the future.

To cultivate an awareness of the functional and æsthetic qualities of simple materials, and an appreciation of the essential principles of construction as well as a power to observe the uses and enjoy the beauties of buildings—these are the basic foundations on which may be built up more detailed historical knowledge, or more definite conscious taste. To this end Mr. and Mrs. Manning Robertson, with their joint appreciation of the technical and the non-technical standpoints, and of the intimate, indissoluble relation between the two, discuss various aspects of their subject. In twelve concise chapters they treat of the brick, the beam and the arch, timbers, "The House," and various details about it, besides such matters as colour and shadow, grouping and proportion, decoration, and the elements of engineering, while some more general notes co-ordinate the separate parts of the whole and a few reasonable sketches and diagrams support the statements of mechanical facts or the formulation of some basic opinion in æsthetics.

Because the book is so valuable as the thing it sets out to be, one is the more aware of its failings. Most noticeable among these is a tendency here and there to lapse into the slightly irritating chattiness, with an element of condescension, which is too commonly supposed to appeal to "the young." One wonders whether such a manner of addressing boy and girl readers really produces the desired result, or whether it does not produce rather a tolerant pity, not untinged with contempt, which the growing-up child accords to the grown-up who attempts to be childish.

For instance, the schoolboy knows better than to expect to gather "roast chestnuts" from the Spanish chestnut tree, even though he knows also that they are not the battling variety. That sort of grown-up childishness would have spoiled that jolly chapter on timber for many of us at the school age. On the other hand, to assume that "It will, of course, be understood" that certain members in the king post truss are shown "end on" is to assume quite a considerable knowledge on the part of the school-child, and even of some of his elders.

There is a little too much about the "sham chocolate" for the palate of many of the serious-minded youngsters of today, when quite a number of modern children have a healthy ability to eat rice pudding. The authors run off again on a grown-up sentence rather too heavy for any but a sixth-form fellow to enjoy when they write of "apt recognition that distinguishes good judgment from the mere expression of a valueless opinion." But if Smith Minor has been "doing" grammar he will exult impudently in catching them out with "the roof, which are used almost entirely to keep off the wet and for no other purpose."

To return, however, to the book's abundant virtues, one should mention the admirable analysis of stresses and strains in the roof truss, and in steel and concrete construction. The non-technical amateur of architecture may dispute the statement that "an understanding and love of architecture comes from understanding why things stand up," but the fact remains that such knowledge is one of the firmest foundations of individual appreciation and of constructive public opinion, more particularly when it grows from and is exercised by such intelligent observation as that which this volume aims at encouraging in the citizens of the rising generation. V. M. C.

Foundations of Architecture. By Manning and Nora Robertson. With an Introduction by C. H. Reilly. London: Edward Arnold & Co. Price 3s. 6d. net.

Publications Received

Report of the Mid-Cheshire Joint Town Planning Advisory Committee, 1929. Price 10s. 6d. net.

The Furniture Year Book, 1930. Second year of publication. Issued by the National Federation of the Furniture Trades.

Building Science Abstracts. Compiled by the Building Research Station and published in conjunction with the Institute of Builders. Vol. ii. (new series) No. 12. December, 1929. Abstracts Nos. 2444-2646. Price 9d. net



The Market Place, Foggia, Southern Italy.

[*From* The Town Planning Review.

NEW SIX-STORY TIMBER WAREHOUSE IN BARBICAN, E.C.

DESIGNED BY S. TOWSE



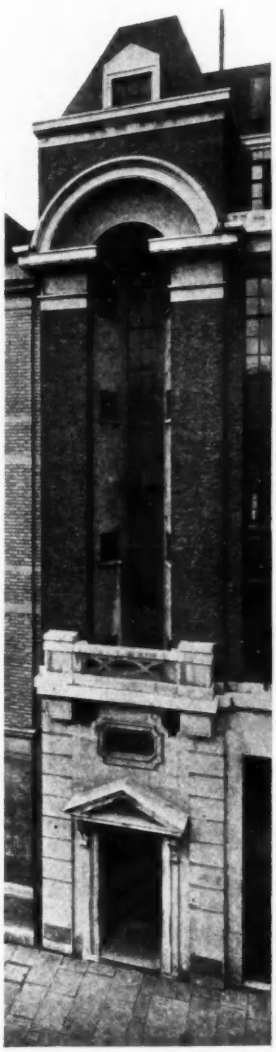
The main front is faced with 2-in. red variegated bricks, with dressings of artificial stone.

THE firm of Messrs. Ingram, Perkins & Co., Ltd., timber merchants, was founded in 1797, and until recently was housed in a heterogeneous collection of timber sheds and offices. The opportunity arising to acquire some adjoining property, they have now had erected, in Beech Street, an up-to-date building that will allow for future expansion.

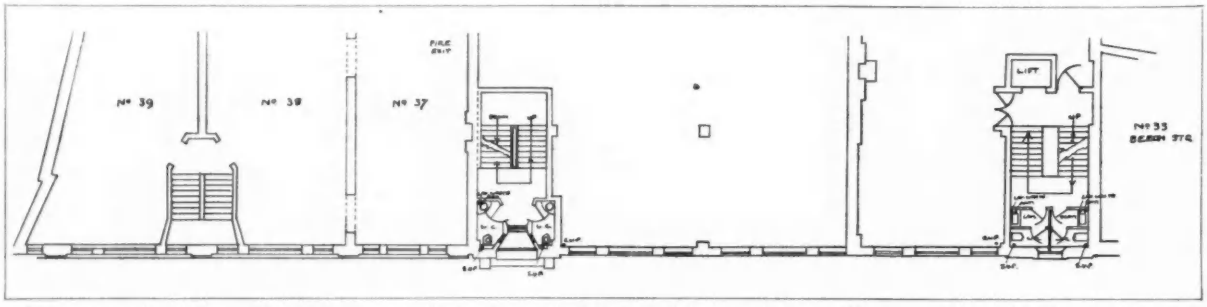
The building is steel framed throughout, and faced with 2-in. red variegated facing bricks on the main front. The dressings are in artificial stone, and as large a space as possible has been devoted to windows in order to obtain the maximum amount of light, the street being narrow. The whole of the basement and first floors are used as a timber store and office. The upper floors are let out as offices and workshops, and an electric crane is provided at the back of the building in Red Lion Square to serve all floors.

The accompanying illustrations show the ingenious manner in which the principal staircases and lavatories are planned on the main front. These two staircases are provided with electric lifts in the staircase well. The lavatories are arranged on the mezzanine landings of the staircases, which are lit and ventilated by canted recesses in the front walls. This ensures good lighting to the staircases and enables the various soil and anti-syphonage pipes to be carried down the recesses and to be invisible from the front of the building.

The adjoining property on one side of the building being old and dilapidated, it was necessary to carry the foundations down to a depth of 18 ft. or more. Special consent had to be obtained from the L.C.C. for building above the height allowed for in a narrow street, and the building being over 250,000 cubic feet, it was necessary to divide up the various floors by division walls fitted with double steel doors.



One of the two recessed staircase and lavatory blocks.



The outstanding features of the building are the two recessed staircase and lavatory blocks. The manner in which these are planned ensures good lighting to the staircases and enables the soil and anti-syphonage pipes to be carried on the internal walls.

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

Paintings by Brangwyn

MR. HORRABIN asked the First Commissioner of Works if he intended to accept the recommendation of the Royal Fine Arts Commission that the paintings by Mr. Frank Brangwyn, R.A., executed under the bequest of the late Earl of Iveagh, should not be placed in the Royal Gallery; and, if so, whether he proposed to find some other place in the Palace of Westminster for these paintings.

Mr. Lansbury said that the matter was about to be considered in the House of Lords, and until he learned the result of their deliberations he was not able to make any announcement.

Official Visits Abroad

Sir Lambert Ward asked the First Commissioner of Works whether any permanent official or officials of his department other than architects, engineers, and supply officers, had visited since June 1929, or proposed to visit during the coming twelve months, any buildings occupied by British representatives or officials in oversea countries; and, if so, in what capacity, for what purpose, and at what cost to the Exchequer.

Mr. Lansbury said that no officials, other than technical officers, had been sent abroad since June 1929, but he had asked the Permanent Secretary of his department to proceed to Washington on March 26th on business connected with the new Embassy. The cost would be under £200.

Non-Parlour Houses

Sir Kingsley Wood asked the Minister of Health if he would give, for a convenient date in February in 1928, 1929 and 1930, the average superficial area for A-type non-parlour houses erected by local authorities in England and Wales under the Housing Act, 1923, and the Housing Act, 1924, respectively.

Mr. Greenwood said that figures for the month of February, 1930, were not yet available. The average superficial areas of A-type non-parlour houses included in contracts let by or in direct labour schemes of local authorities in England and Wales during the month of January in the years 1928, 1929 and 1930, were 785, 761 and 749 feet respectively. Separate particulars as to the average areas of houses erected under the Housing Act, 1923, and the Housing (Financial Provisions) Act, 1924, respectively, were not available.

Dr. Vernon Davies asked what effect, if any, the Housing (Revision of Contributions) Act, 1929, had had upon the average price of parlour and non-parlour houses.

Miss Susan Lawrence said that the Act of 1929 came into operation on October 1st, 1929. The average price of non-parlour houses in contracts approved during the six months ended September 30th, 1929, was £346, and for the four months ended January 31st, 1930, had been £337. The average sizes of these houses were substantially the same. As regarded parlour houses, the corresponding figures were £404 and £422, but there had in this case been an appreciable increase in the size of the houses concerned.

Rent Restrictions Act

Mr. Morley asked the Minister of Health if his attention had been called to the excessive rents often charged for decontrolled houses; and if he proposed to introduce legislation to set up fair-rent courts.

Mr. Greenwood said that this matter would receive consideration in connection with any legislation amending the Rent Restriction Acts, but it would not be practicable to introduce further legislation in the immediate future.

Mr. Harris asked the Minister of Health whether he was aware that the Rent Restrictions Act was being evaded by property owners by allowing properties to get into such a bad state of repair that local authorities had to issue a closing order, so that the owner got possession and let the property at a much higher rent for commercial or other purposes; and whether he would consider introducing amending legislation in his contemplated Housing Bill to meet cases of this kind.

Mr. Greenwood said he would consider the suggestion. Local authorities had already wide powers of requiring the execution of works necessary to keep houses in all respects fit for human habitation.

READERS' QUERIES

LEAKY ROOF

J. A. W. writes : " *Do you consider that torching with lime and mortar is likely to be a successful and lasting cure for twenty-one years in the case of a badly leaking roof, the tiles of which are badly laid and porous, and which is exposed to the full force of south-westerly gales ?* "

The roof is said to be " badly leaking," which may be due to a variety of causes. As the tiles are described as " badly laid and porous," presumably other possible causes have been ruled out—such as insufficient pitch, inadequate lap, or age resulting in decay of tile-laths or nails, with slipping. If battens are sound and " badly laid " means irregular inch spaces through which wind can blow, I am of opinion that well-executed torching, by stopping the passage of strong winds, should make a dry roof, pitch and lap being adequate —say over 45° and not less than 4-in. gauge to tiles 10½ in. long. Should, however, the tiles be not only porous but *permeable* (that is, allowing soakage and dripping *through* the tiles), then the torching would be apt to become saturated, and would effect little improvement in times of stress such as the recent rain-laden gales. E. G.

RETENTION OF MONEY UNDER CONTRACT

E. C. T. writes : " *A sum of money is held on retention under a contract, and has become due for payment. During the maintenance period defects developed in the floor, but, owing to the building being fully equipped with machinery, it is not convenient to effect the necessary repairs. Under the circumstances, is it legal to withhold part of the retention money for a further period ? The defects consist of a settlement and cracks, which are still moving.*"

From the facts before me it appears that a sum of money is due under a contract, and before payment has been made certain defects have developed in the building consisting of a settlement and cracks which are still extending.

The question is whether it is legal to continue to withhold payment of the whole or part of the money which is due and payable under the contract for a further period, having regard to the events that have happened.

In my view, and I am clearly of opinion that, the rights of the parties are governed by the terms of the contract. In the absence of the contract before me it is impossible to give a final opinion of the rights of the parties thereunder. In the absence of provision to the contrary expressed in the contract or any custom of the trade to the contrary, the money is due and payable when the parties so agree. The person to whom it is payable is in a position to issue a writ forthwith for the whole amount, unless the defendant alleged that he had a counter-claim for damages which equalled or exceeded the amount then due and payable.

Unless the defendant could swear to the truth of this, the plaintiff would be entitled to judgment for the whole of the amount due under the contract, or, alternatively, if the counter-claim did not equal or exceed the amount of the claim, then the plaintiff would be entitled to judgment for the balance.

If the defendant alleges that his rights are based on custom in the trade, it is necessary for him to prove, first, that the custom is reasonable; secondly, that it is not contrary to the general law.

The onus of proof lies on the person alleging the custom, and if he fails to prove it, the plaintiff will succeed in his claim for moneys due under the contract. E. F. I.

Plan, elevation and details of the fireplace in the old dining-room at Steine House, Brighton, measured and drawn by William J. Thrasher. The fireplace is one of the few remaining relics of this historical house, which was built for Mrs. Fitzherbert, a Regency beauty, from the designs of Porden.

SOCIETIES AND INSTITUTIONS

WEST YORKSHIRE SOCIETY OF ARCHITECTS

A STUDENTS' evening, under the auspices of the above society, was held at its Leeds headquarters on Thursday last, when a debate "Is the Skyscraper Architecture?" took place. Mr. J. G. Sidebottom occupied the chair.

Opening in the affirmative, Mr. D. B. Smith observed that owing to the methods of construction now at their disposal, the sky was literally the only limit to vertical design. The skyscraper instead of being an innovation was now a matter of history. In Europe, however, it was not regarded as architecture, but merely as a feat of engineering, but when the practical requirements of a building formed a beautiful composition, without any major sacrifice, then architecture could be said to have been achieved. The skyscraper confined itself to commercial architecture, and was more adapted to the office block than any other type of structure, admirably fulfilling such requirements.

Mr. J. L. Crowther, taking the negative view, said that although some skyscrapers were undeniably fine, they were not a true expression of modern life or ideas. Modern architecture had not only to provide buildings that were efficient in themselves, but to provide structures that were pleasant to live and work in. Skyscrapers were not a natural growth, due to the needs of modern civilization, but merely the outcome of speculation and opportunities for advertisement. They congested the streets and subways of a city. Skyscrapers, he pointed out, had been forced upon New York owing to the growth of the city being limited by the confines of the island of Manhattan.

Among the other speakers were Messrs. J. Addison, Norman Culley, B. R. Gribbon, F. Chippindale, G. L. Broadbent and C. Smith.

After a lengthy discussion the motion "That the skyscraper is not architecture" was defeated.

LIVERPOOL ARCHITECTURAL SOCIETY'S DINNER

Professor C. H. Reilly, F.R.I.B.A., proposing the toast of "Liverpool," at the Liverpool Architectural Society's annual dinner, said that they must look at their towns as works of art. That, he said, seemed an impossible ideal, but it must be there. He visualized Liverpool as it might be, and asked those present to imagine brightly-lit streets of elegant, refined, and happy buildings, and, as they climbed the hill, broad tree-lined avenues leading to the fanes they were building, and would build. Those races which built temples were the races which had affected the culture of the world, and they in Liverpool were temple-builders. No other city had had Liverpool's extraordinary fortune, of beginning one cathedral before another was finished.

Sir Banister Fletcher, P.R.I.B.A., urged architects to come out of their offices, and by serving on borough councils and such-like bodies to help to give an artistic end to the community. He did not think the R.I.B.A. were beaten yet over the Charing Cross bridge scheme. The St. Paul's Bridge was passed twice, but they managed to have it postponed until the Commons threw out the original scheme.

Mr. Duncan Campbell, president of the Society, occupied the chair.

SOUTH WALES INSTITUTE OF ARCHITECTS

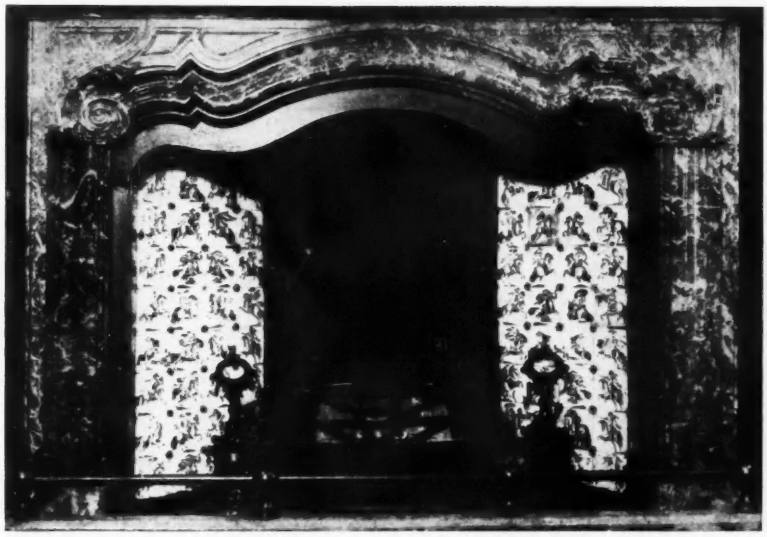
At the annual general meeting of the South Wales Institute of Architects, the following officers of the Institute were re-elected for the session 1930–31, which commences on July 31: President, Mr. T. Alwyn Lloyd, F.R.I.B.A.; vice-presidents, Messrs. C. S. Thomas, F.R.I.B.A., and J. Herbert Jones, F.R.I.B.A.; hon. treasurer, Mr. H. Teather, F.R.I.B.A.; hon. auditor, Mr. E. H. Fawckner, F.R.I.B.A.; hon. librarian, Mr. R. H. Winder, M.A., A.R.I.B.A.; and hon. secretary, Mr. Ivor P. Jones, A.R.I.B.A.

THE NATIONAL GRID SYSTEM

Reviewing the position of recent developments in the electricity supply of Great Britain, with special reference to rural electrification, Sir Harry Haward, speaking at a meeting of the Surveyors' Institution, said that the national grid system no longer existed on paper only, but was on its way to becoming an established fact. Substantial progress was being made with the work of construction in face of some difficulties. The question of routes in certain picturesque parts of the country, which threatened to impede progress, was in process of solution and, with goodwill and the frank recognition of the paramount claims of the national scheme, difficulties would disappear.

Smoke and grit, he pointed out, should no longer be a nuisance in a modern power station, and recent experiments showed that the oxides of sulphur could be eliminated. The national scheme would go ahead rapidly, and in a few years' time the country would be served by a comprehensive system of generation and bulk transmission based on the most modern technical practice, which would effect large economies and cheapen the cost of electricity to consumers all over the country.

He stated that the potential demand in the country districts during the next ten years had been computed at 280 million units, which represented a very substantial addition to the load on the national system.



The fireplace in the dining-room, Steine House, Brighton, measured drawings of which are reproduced on the facing page. The fireplace has a marble surround, an old firegrate with iron fireback, and Dutch tiles.

L.C.C. SCHOOL OF BUILDING PRIZES DISTRIBUTION

At the annual exhibition of work and distribution of prizes of the L.C.C. School of Building, the Rt. Hon. Philip Snowden, M.P., presented the

medals, prizes and certificates. Mr. H. D. Searles-Wood, F.R.I.B.A., occupied the chair.

Mr. Snowden, in addressing those present, said it was a deplorable thing that so many of the children of today left school and drifted into unskilled occupations. He wanted to see workmen trained so that their work would be a joy to them, for the men to feel satisfaction in it, and also to feel that they were not merely earning a week's wages, but doing work which would be a benefit to the community.

THE CHURCH IN EARLY DAYS

Sir Banister Fletcher, P.R.I.B.A., lecturing at the Central School of Arts and Crafts, on Early Christian Architecture, said that the first Christian churches were of special interest as the forerunners of all the wonderful developments in architecture and craftsmanship devoted to the service of the Christian religion throughout the world, and the style, both in respect to its predecessors and successors, illustrated the continuity of architectural development.

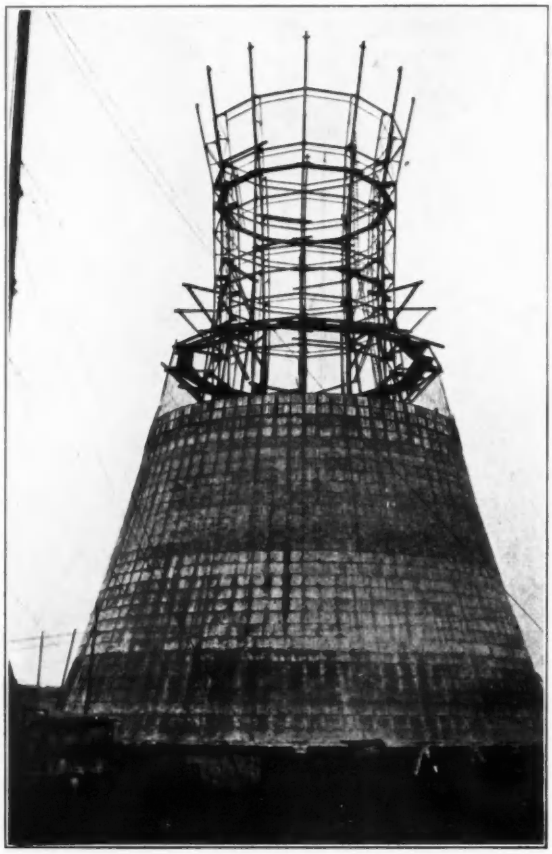
REINFORCED CONCRETE COOLING TOWERS

Mr. A. T. J. Gueritte, reading a paper on "Reinforced Concrete Cooling Towers," at a meeting of the Institution of Structural Engineers, said that one of the most striking applications of reinforced concrete during the last few years had been in the shape of large cooling towers which were a most prominent and impressive feature in some of the power-stations recently erected or developed in this country under the general scheme of electrification of the Central Electricity Board.

He pointed out that the type of natural draught cooling tower which was most widely known as used in this country up to 1924 was the timber type of rectangular shape in plan, and the chimney of which tended to assume a square section at the top. He explained the many drawbacks of such towers, and said they had led to the use of steel in some cases; but it was found that, notwithstanding heavy cost in painting and upkeep of various kinds, the damp and sulphurous atmosphere in which such towers were generally situated, and the fact that the water circulated in them was often chemically impure, rendered the life of steel towers too short. In two of the most important cities of Great Britain the life of such towers did not exceed eight years.

Reinforced concrete was consequently thought of, and at first the design followed closely the lines of the rectangular timber towers. However, it was soon discovered that the regulations governing the design of such large expanses of walls in reinforced concrete rendered this material too costly when taking into account the impact of the wind on structures of such height not braced at short intervals by floors, as were ordinary buildings.

Designs of polygonal shape were gradually evolved and were of two kinds: the first composed of a number of vertical stanchions, from 8, 10 or 12 ft. apart, braced horizontally at intervals of some 12 to 18 ft., forming the framework for wall panels, the whole being moulded *in situ*, an arrangement which proved also somewhat too costly; and the second, based upon the general principle first introduced by Monnoyer, in Belgium, about 1909, and mostly known for its application to the construction of chimney shafts; precast blocks provided with a kind of hook at one end, in plan, and built up on the top of each other with a mortar joint, the ultimate result being a multi-polygonal structure with a projecting rounded rib at each apex, the distance from rib to rib being approximately 3 or 4 ft. Such walls could be built vertical, or if preferred, a slight batter could be given (see illustration below).



The lower part of the first Leicester cooling tower in course of erection. The steel scaffolding shown is somewhat in advance of the concrete work, and the metallic forms can be clearly seen. No external scaffolding was necessary, with the exception of suspended flying hangways.

OBITUARY

JOSIAH GUNTON: 1861–1930

We regret to record the death, which occurred in the South of France, of Mr. Alderman Josiah Gunton, F.R.I.B.A. He had been in comparatively ill-health for some time.

Mr. Gunton, who was in his sixty-ninth year, commenced his architectural practice in 1885 and, up to the time of his death, was in partnership with members of his family as architects and surveyors. He was responsible for the design of many buildings in London and the provinces.

He was a member of the City Corporation since 1904, and chairman of many of the principal committees of that body. For the last three years he was one of the City's representatives on the London County Council. He was also a member of the Metropolitan Water Board, the Wheelwrights' Company, a director of the Eagle, Star and British Dominions Company, and one of His Majesty's Lieutenants for the City of London.

WILLIAM B. WALTON: 1883–1930

The death took place at Cleveleys, near Blackpool, of Mr. William Billingham Walton, F.R.I.B.A., who was, until his retirement a year ago, a member of the firm of Lumb and Walton, architects and surveyors. He was forty-seven years of age, and a recipient of

the Society of Architects' travelling studentship and silver medal for 1908.

The firm with which Mr. Walton was associated was responsible for the the design of many of the public buildings in the Fylde's, including the following: Savoy Hydro, Blackpool; Regent Picture House, Blackpool; Manchester and Liverpool district branch banks at Blackpool, Cleveleys and Bispham; a large number of residences in Blackpool, St. Anne's, Lytham, Thornton, Halifax and Huddersfield districts; also various offices, works and factories.

GEORGE S. NICHOL: 1878-1930

We regret to record the death of Mr. George Salway Nichol, F.R.I.B.A., of Birmingham. Mr. Nichol, who was fifty-two years of age, was a member of the firm of Nichol and Nichol.

He was educated at the Architectural Association, and a winner of their Travelling Studentship. He also won the R.I.B.A. Tite Prize.

Among the buildings executed by him, in partnership, were: Hearts of Oak Benefit Society's Offices, Euston Road, London (won in competition); Picture House, and St. Benedict's Church, Birmingham; St. Chad's Church, Bradford; and housing for Birmingham Corporation, etc.

ROBERT E. WINDER: 1858-1930

Mr. Robert Edmund Winder, L.R.I.B.A., died recently at his home in Sheffield, at the age of seventy-two. He was articled to his father, and served five years' apprenticeship in the Duke of Norfolk's estate office, before founding the firm of Edmund Winder & Co., architects and surveyors. His chief architectural works were buildings in Sheffield, and one of these, the Blind Institution, was won in competition.

COMPETITION CALENDAR

March 31. — The Accrington Corporation invites architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor: Herbert J. Rowse, F.R.I.B.A. Premiums: £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars, may be obtained from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before March 31.

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated in 1930. Assessors: Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums: £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs: April 28.

June 14. — The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit, £1 1s. Latest date for submission of designs: June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor: J. Ernest Franck, F.R.I.B.A. Premiums: £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall which is to be built on the site of the old town hall, at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

No date.—The Leicester Corporation invites local architects to submit designs for the erection of a library at West Humberstone. Assessor: Hugh Gold, F.R.I.B.A. Premiums: £75, £50, and £25.

The Hackney B.C. Establishment Committee recommends a competition in connection with the town hall extension. The Committee is of opinion that the amount to be spent on the building extension should be £100,000, exclusive of the cost of the site.

TRADE NOTES

The Underground Railway, in collaboration with the Electric Lamp Manufacturers' Association of Great Britain, Ltd., have just completed an exhibition at Charing Cross Station for the purpose of indicating to the public the possibilities of modern electric lighting both from the utility and decorative points of view. Mr. R. W. Maitland was responsible for the design of the stand.

For the convenience of architects interested in the manufacture of glass, Messrs. Chance Brothers & Co., Ltd., have opened an office in London at 23 Old Queen Street, Westminster. This office is conducted by Mr. M. L. Anderson, who will be pleased, at any time, to give architects actual demonstrations of the behaviour and effects of different glasses under different circumstances and conditions of treatment. He will also be glad to call at architects' offices to give any information or advice of which they may stand in need, on all questions of glass and glazing.

A fusion of manufacturing interests has been arranged between the Relay Automatic Telephone Company, Limited, and the Sterling Telephone and Electric Company, Limited. The manufacturing facilities at Relay House, Streatham Hill, will be considerably augmented to deal with the dual output of these two companies, which will manufacture automatic telephone apparatus and manual telephone apparatus respectively. All inquiries in connection with the Sterling Company's products should now be addressed to: Relay House, Streatham Hill, London, S.W.2.

Many new ideas in steel shutter construction are given in the revised edition of the Rolador catalogue, just published by Messrs. E. Pollard & Co., Ltd. Since the issue of the last catalogue many ingenious and interesting innovations have been made to this well-known shutter. The thickness of Rolador laths is 14 B.W.G., and the firm's engineers consider that this is the minimum thickness advisable if heavy wind pressure and hard usage is of first consideration. With the object of obtaining great rigidity, the underlying section of the Rolador lath is that of a channel, and this, together with its thickness, results in a curtain able, it is claimed, to withstand high winds even in very wide sections. The shape of the lath forms a perfect drip. The unique method of coiling forms one of the principal Rolador patents and results in a coil of small diameter.

Healthy Heating, a folder just issued by Messrs. Young, Osmond and Young, Ltd., illustrates and describes the "Unity" tubular electric skirting heaters. These can be fitted along the skirting boards under bay windows, in the hall, on landings and in passages. They can be placed on all four walls of a nursery or a bedroom. They consist of a heating element enclosed in 2-in. diameter steel tubes, and are light in weight, but are claimed to be tremendously strong, to eliminate fire risks, and to be entirely free from dust and soot. They are made in lengths from 2 to 17 ft. The tubular system has also been adapted for the linen cupboard, and as towel rails for bath, bed and dressing rooms. A useful thermostat can also be used where "Unity" tubular electric heaters are installed, either as the sole means of heating or in conjunction with an open coal or gas fire. It controls the temperature of a room. You set it at, say, 60°. As soon as the warmth of the room reaches a fraction more, the thermostat automatically switches off the skirting heaters. Alternatively, as soon as the air temperature of the room drops below 60° the thermostat switches on the heaters. It does this without personal attention. The thermostat is fitted on the wall in the same manner as an electric light switch. It is connected with the skirting heaters, but all the fittings, wires, etc., can be hidden in the wall.

In compiling their new booklet of light constructional work, the main aim of Messrs. H. and C. Davis & Co., Ltd., has been to show, by means of illustrations, the extent and variety of their ramifications in this direction, all photographs being of jobs actually carried out. The photographs include fire-escape staircases, spiral stairs, ornamental staircases, wrought-iron railings and gates, lift enclosures, ornamental wrought-iron panels, balconies, bank grilles, casements and ventilators, turntables for cars, washdowns for garages, etc. The firm have manufactured and fixed their fire escape, service and spiral staircases, and other light constructional steel and iron work, for Government departments, public authorities, public and private companies. Their ornamental ironwork for cinemas and other places of amusement has been used in all parts of the United Kingdom, including: Aldwych Theatre, W.C.; Opera House, Croydon; New Theatre, W.C.; Queen's Theatre, W.; Wyndham's Theatre, W.C.; Royal Theatre, Bradford; and at Balham, Eltham, Allenton, Camberwell, Richmond.

Messrs. Drytone, Ltd., have opened new showrooms and offices at Drytone House, 65 High Street, Camden Town, N.W.1 (telephone: Museum 9938), in direct connection with their works immediately behind. All communications should now be addressed there.

A draft Order-in-Council was laid before Parliament on January 29, 1930, in pursuance of section 7 of the Merchandise Marks Act, 1926, to require imported roofing slates to bear an indication of origin. Copies of the draft Order are obtainable from H.M. Stationery Office, or through any bookseller.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Probationers' Training School, Huntley Street, W.C. (pages 455–460). General contractors, Ashby and Horner, Ltd., who were also responsible for various joinery work, including tiled benches in kitchen. Sub-contractors: Redpath, Brown & Co., Ltd., steelwork; British Reinforced Concrete Engineering Co., reinforced steel; Lawfords & Co., asphalt; Excelsior Stone Co., stairs, etc.; Pilkingtons Tile and Pottery Co., Ltd., dado tiles to stairs; J. Jeffreys & Co., Ltd., heating; Smith, Major and Stevens, Ltd., lift; Mitchell & Co., wood block floors; James Gibbons, Ltd., lifts, screens and door furniture; Crittall Manufacturing Co., Ltd., metal windows; W. Hichens, panelling; Dent and Hellyer, Ltd., sanitary goods; Clarke & Co., Ltd., electric work; Adrian Stokes, wrought-iron balcony, etc.; J. Daymond and Son, Ltd., carving on exterior panels; Camden Tile Co., Ltd., terrazzo paving; Bratt Colbran & Co., grates.

All Saints' Church, East Sheen (pages 461–465). General contractors, Dove Bros., Ltd., who were also responsible for the oak altars, choir stalls, Communion benches and font. Sub-contractors: Mumford, Bailey and Preston, Ltd., heating installation; Thomas Mitchell (Guildford), Ltd., external facing bricks; S. and E. Collier, Reading, internal facing bricks; Wiggins, Sankey, Ltd., roofing tiles; A. Beanes & Co., Ltd., steel casements; R. E. Pearse & Co., Ltd., lead glazing; J. W. Gray and Son, Ltd., lightning conductor; Mears and Stainbank, bell; Hollis Bros. & Co., Ltd., oak block floors; John Tann, Ltd., safes and alms boxes; Yannedis & Co., ironmongery; Gray and Davison, Ltd., organ; West and Collier, Ltd., chairs; Brown and Englefield, pewter ornaments for altars, processional cross, etc.; The Warham Guild, Ltd., silver chalices and altar hangings.

Nos. 35–37 Beech Street, Barbican, E.C. (page 472). General contractors, John Marsland and Sons, Ltd., who were also responsible for the excavation and demolition. Sub-contractors: B. Goodman, Ltd., demolition; Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt; S. E. Collier, Reading, bricks; Stuart's Granolithic Co., Ltd., artificial stone; Lambourne & Co., structural steel; W. H. Heywood & Co., Ltd., patent glazing; Automatic Sprinkler Co., Ltd., sprinklers; Rosser and Russell, Ltd., central heating; the Gas Light and Coke Co., Ltd., gas fixtures and gasfitting; Burn Bros. and H. Pontifex and Sons, Ltd., sanitary fittings; Nettlefold and Sons, Ltd., and Lips, Ltd., door furniture; Crittall Manufacturing Co., Ltd., casements; Haywards, Ltd., folding gates and iron staircases; the Express Lift Co., Ltd., lifts; Marryat and Scott, Ltd., cranes. The whole of the timber was supplied by the owners, Ingram, Perkins & Co., Ltd.

Thames House, Millbank, S.W. (page 452). General contractors, John Mowlem & Co., Ltd.; Dorman, Long & Co., Ltd., steelwork; Mr. Harley H. Dalrymple-Hay, M.INST.C.E., in association with Sharman and Travers Morgan, consulting engineers.

The shopfront at Nos. 21–22 Sloane Street, S.W.1 (page 449), was carried out by F. W. Sage & Co., Ltd.

House at Reigate, Surrey (pages 480–481). General contractor, T. Nightingale. Sub-contractors: Wotton and Son, glass; Teuten & Co., Ltd., stoves, grates, sanitary fittings, door and window furniture, and mantels.



The stand of Messrs. John Walsh Walsh, Ltd., at the British Industries Fair, Olympia. The pelmets, panels and wall lights were in Vesta glass, and provided an effective foil to the darker shades of the woodwork.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.

LATEST PATENT APPLICATIONS

5630. Chettle, W. A. Shuttering reinforced-concrete structures. February 28.

5832. Hokanson, A. E. Collapsible framework structures. March 1.

6221. Kotrbaty, G. F. Building construction. February 25.

6179. Swindells, C. W., and Swindells, H. Cement building-block. February 25.

THE ARCHITECTS' DIARY

WEDNESDAY, MARCH 19

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. Annual Reception. **8 p.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Design in Town Planning." By Dr. Raymond Unwin, F.R.I.B.A. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Portrait in Later Monumental Sculpture." By K. B. Esdaile (Mrs.). Charles Reed Peers, C.B.E., P.S.A., F.B.A. will preside. **8 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "The Beautiful Town." By the Very Rev. the Dean of Manchester. Rev. Harold Anson, M.A., will occupy the chair. **8 p.m.**

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Early Christian Architecture (A.D. 300–900)." By Sir Banister Fletcher, P.R.I.B.A. **6 p.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C. 2. Open every Tuesday, Wednesday, Thursday, and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

THURSDAY, MARCH 20

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Architects' Working Drawings. Until April 3. Also Students' Evening in connection with this Exhibition. **8 p.m.**

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. Election of Officers. "Mainly About Germany." By Howard Robertson, F.R.I.B.A., S.A.D.G. **7 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "London in the Middle Ages." By D. Martin Roberts, M.A. (Lantern Illustrations.) **7.30 p.m.**

FRIDAY, MARCH 21

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. "The Medical and Surgery Applications of Electricity." By Dr. Bernard Leggett. **6 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Annual Meeting at the Royal Institute Galleries, Piccadilly, W.1. 3 to 5.30 p.m. **3 p.m.**

BRITISH ELECTRICAL DEVELOPMENT ASSOCIATION. Annual Luncheon at the Savoy Hotel, Strand, W.C. 12.45 for 1 p.m. **1 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "The Healthy Town." By Dr. Leonard Hill, F.R.S. Lady Maurice will occupy the chair. **8 p.m.**

SATURDAY, MARCH 22

Sunrise, 6 a.m. Sunset, 6.15 p.m.

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Houses at Home and Abroad." By Oswald P. Milne, F.R.I.B.A. (Lantern Illustrations.) **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Post Office (London) Railway, Mount Pleasant, N.W. **4 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visits to the offices of the Allied Newspapers, 200 Gray's Inn Road, W.C. 1. 4.30 p.m. and 6.30 p.m. **4.30 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. Conference on "Architecture and Modern Civilization." W. H. Ansell, M.C., F.R.I.B.A., and Elizabeth Scott (Miss), A.R.I.B.A. 2.30 till 4.15 p.m. Frederic Towndrow, A.R.I.B.A., and Minnie Pallister (Miss). 5 till 6.30 p.m. Helen Ward (Miss) will occupy the chair on both occasions. **2.30 p.m.**

MONDAY, MARCH 24

ARCHITECTURAL ASSOCIATION, 34 Bedford Square, W.C.1. "Style in Sculpture." By Eric Gill. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

IDEAL HOME EXHIBITION, Olympia, W. Organized by *The Daily Mail*. Open until April 17.

TUESDAY, MARCH 25

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Dominions and Colonies Meeting. "The Work of the British Association in Relation to the Empire." By O. J. R. Howarth, O.B.E., M.A. **4.30 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. "Tyne Bridge, Newcastle." By David Anderson, B.SC., M.INST.C.E.; also "The New Wearmouth Bridge, Sunderland." By Geoffrey L. Groves, B.SC., M.INST.C.E. The papers will be followed by a discussion. **6 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North Midland Centre. At the Hotel Metropole, Leeds. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

WEDNESDAY, MARCH 26

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Architecture of To-day and To-morrow." By Howard Robertson, M.C., F.R.I.B.A., S.A.D.G. Charles Marriott, HON. A.R.I.B.A., will preside. **8 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Nature and Modern Design." By Professor R. V. Gleadowe. (Lantern Illustrations.) **7 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Students' Meeting. "Nomography as Applied to Engineering." By Philip J. Pollock, B.A. Dr. Oscar Faber, O.B.E., M.INST.C.E., will occupy the chair. **6.30 p.m.**

THURSDAY, MARCH 27

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Some New Ideas on the Design of Dams." By E. Godfrey. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Lacquerwork: Its History, Influence and Decorative Qualities." By E. R. Gribble. **7.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Development in Machine Telegraph Systems and Methods of Operation." By H. H. Harrison. (Light refreshments, 5.30 p.m.) **6 p.m.**

FRIDAY, MARCH 28

INSTITUTION OF ELECTRICAL ENGINEERS. North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Marine Diesel Installations, with particular reference to Auxiliary Machinery." By J. Calderwood, M.SC. **7.15 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Annual General Meeting. Discussion on "Mechanical Solution of Statically Indeterminate Structures." To be opened by H. W. Coultas, M.SC. **6.30 p.m.**

UNIVERSITY SETTLEMENT, Nile Street, Liverpool. Latest date for application for accommodation at the Housing and Town Planning Meetings.

SATURDAY, MARCH 29

Sunrise, 5.44 a.m. Sunset 6.27 p.m.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. Various lectures and conferences for children on "Beautiful England in Education." 3 and 6.30 p.m. Also visit to Welwyn Garden City. (3s. return.) Meet at rear entrance of Guildhouse at 2.30 p.m. **2.30 p.m.**

MONDAY, MARCH 31

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "Loud-Speakers." To be opened by Captain P. P. Eckersley. **7 p.m.**

ACCRINGTON COMPETITION. Latest date for submission of designs for the New Police and Fire Stations.

TUESDAY, APRIL 1

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper by H. Stratton Davis, M.C., F.R.I.B.A. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Annual Business Meeting. **7 p.m.**

WEDNESDAY, APRIL 2

LONDON SOCIETY, Lancaster House, St. James's, S.W. 1. Visit to Wellington Barracks and the Guards' Chapel, under the guidance of Sir Neville R. Wilkinson, K.C.V.O., F.S.A. **2.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. "Building Craftsmanship." By Nathaniel Lloyd, O.B.E., F.S.A. Professor Charles H. Reilly, O.B.E., M.A., F.R.I.B.A., will preside. **8 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "Regional Planning." By Raymond Unwin, F.R.I.B.A. Helen Ward (Miss) will occupy the chair. (Lantern Illustrations.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Tees-side Sub-Centre. At the Cleveland Technical Institute, Middlesbrough. Annual General Meeting, 7 p.m. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." 7.30 p.m. **7 p.m.**

THURSDAY, APRIL 3

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. **7 p.m.**

FRIDAY, APRIL 4

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "The Decentralization of Industry." By Captain R. L. Reiss. Dr. Sybil Plant will occupy the chair. **8 p.m.**

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Council Meeting, 3 p.m. General Meeting, 6.15 p.m. **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Studies in Low-Power-Factor Measurements at High Voltages." By E. H. Rayner, SC.D., W. G. Standring, M.A., R. Davis, M.SC., and G. W. Bowdler, M.SC. **7 p.m.**

SATURDAY, APRIL 5

Sunrise, 5.29 a.m. Sunset, 6.38 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Marble Arch Flats, adjoining Regal Cinema. Meet main doorway in Great Cumberland Place at 2.30 p.m. **2.30 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. Conference on "Planning the England of the Future." Hon. Humphrey Pakington, A.R.I.B.A., and A. T. Pike. 2.30 till 4.15 p.m. Professor Percy Dearmer, D.D. 5 till 6.30 p.m. F. J. Hiorns will occupy the chair on both occasions. (Lantern illustrations.) **2.30 p.m.**

MONDAY, APRIL 7

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Antonio da San Gallo the Younger." By J. Hubert Worthington, O.B.E., M.A., A.R.I.B.A. **8 p.m.**

TUESDAY, APRIL 8

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Textile Lighting." By S. Anderson, B.SC. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Royal Technical College, Glasgow. Annual General Meeting and Ordinary Meeting. **7.30 p.m.**

UNIVERSITY SETTLEMENT, Nile Street, Liverpool. At the David Lewis Club, Great George Place, Liverpool. Lectures on Housing and Town Planning subjects. Visits to new housing estates, tenements and slum districts. Papers will be given at 9.45 a.m. and 8 p.m. Applications for accommodation not later than March 28. Also April 9 and 10. **9.45 a.m.**

WEDNESDAY, APRIL 9

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Preserving our Heritage." By Clough Williams-Ellis, F.R.I.B.A. Hon. Humphrey Pakington, A.R.I.B.A., will occupy the chair. **8 p.m.**

THURSDAY, APRIL 10

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Liverpool Cathedral." By Rev. Canon W. Thompson Elliott, M.A., Vicar of Leeds. (Lantern Illustrations.) **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Surge Investigations on Overhead Lines and Cable Systems." By S. W. Melsom, A. N. Arman, B.SC. (ENG.), and W. Bibby, B.SC. (ENG.). Light Refreshments at 5.30 p.m. **6 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. "Some Interesting Arc-Welded Jobs." By H. B. White and R. Tuddenham. (Lantern Illustrations.) **7.30 p.m.**

NORTHERN POLYTECHNIC, Holloway, N.7. Department of Architecture, Surveying and Building. Annual Speech Night. **7 p.m.**

FRIDAY, APRIL 11

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Excursion to Motor Vehicle and Engine Works of Messrs John I. Thornycroft, Basingstoke.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Modern Civilisation in the Countryside." By J. M. Kennedy. Professor Percy Dearmer, D.D., will occupy the chair. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Address by Colonel Sir T. F. Purves, O.B.E., President of the Institution. **6.15 p.m.**

SATURDAY, APRIL 12

Sunrise, 5.13 a.m. Sunset, 6.50 p.m.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Deptford Power Station of the London Power Co. **2.30 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. Visit to St. Albans. (2s. 6d. return). Meet at rear entrance of Guildhouse at 2.30 p.m. **2.30 p.m.**

SUNDAY, APRIL 13

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Sunlight." By Dr. C. W. Salecby, F.R.S.E. Clare Greet (Miss) will occupy the chair. **3.30 p.m.**

MONDAY, APRIL 14

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Decentralization of Industry." By Dr. Raymond Unwin. **5 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. Annual General Meeting. Mersey and North Wales (Liverpool) Centre. At the Laboratories of Applied Electricity, The University, Liverpool. Annual General Meeting. Both meetings will be held at 7 p.m. Western Centre. At Cheltenham. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.) and L. C. Grant. **7 p.m.**

WEDNESDAY, APRIL 16

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Ultra-Violet Ray Transparent Window Glass." By S. English. **8 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BATTERSEA B.C. has obtained sanction for a loan of £33,000, for the acquisition of St. John's College, for purposes of a housing scheme.

The Surrey Education Committee has obtained land for the provision of a boys' secondary school and a girls' secondary school at COULSDON.

Plans passed by the COULSDON U.D.C.: Two houses, Marlpit Lane, for Mr. H. C. Doddrell; two houses, Bradmore Way, for Mr. W. C. Cremonini; thirty houses, Portnalls Road, for Mr. A. G. Gresswell; six houses, Byron Avenue, for Messrs. Chester and Hopkins; bungalow, Caterham Drive, Old Coulsdon, for Mr. C. E. Hierons; two houses, Mosslea Road, for Messrs. O'Sullivan, Ltd.; two houses, Bradmore Way, for Mr. V. R. Westrope; five houses, Bradmore Way, for Mr. E. W. Booth; Roman Catholic church, Chipstead Valley Road, for Mr. A. G. Scott; house, Hermitage Road, Kenley, for Mr. H. How.

The Office of Works is obtaining a site in Barking Road, EAST HAM, for the erection of an employment exchange.

The EAST HAM Corporation has instructed the borough engineer to prepare draft plans for the layout of the Durban House site for the erection thereon of a maternity hospital, maternity and child welfare centre, dental clinic and a tuberculosis dispensary.

The EAST HAM Corporation has asked the borough engineer to prepare draft plans for the development of the site in High Street South, for the accommodation of the Public Health Department, including school clinics, education department and a police court.

The EAST HAM Corporation Works Committee has approved plans for the erection of seventy-eight double-tenement houses and forty-eight single-tenement houses on the Charlemont Road housing site, the estimated cost of which is £111,420.

Plans passed by the EAST HAM Corporation: Alterations, 33 High Street, for Mr. C. Living, Junr., F.S.I.; alterations, 37-39 High Street, for Mr. J. F. Nott; five houses, Katherine and South Esk Roads, for Messrs. S. Seymour & Co.; house and five garages, Elsenham Road, for Mr. T. Bedford; fifty houses, Nelson Street, Sussex Road and Market Street (amended plan), for Mr. C. Griffiths; office and repair shop, Watson Avenue, for East Ham Haulage Co.

The L.C.C. Education Committee has selected a site on the Bellingham estate, LEWISHAM, for the erection of a secondary school for 450 girls.

Plans passed by the LEWISHAM B.C.: Buildings, Bromley Road, for Mr. A. Frampton; building, rear, 64 Manor Lane, Lee, for Mr. A. H. Pratt; two houses, Lawrie Park Gardens, for Mr. E. J. G. Light; additions, 426 Downham Way, for Mr. A. Frampton; building, Southend Lane, for South Suburban Gas Co.; garages, Inchmery Road, for Messrs. T. H. Sawyer and Sons, Ltd.; nine houses, Newquay Road, for Mr. T. A. Boughton; four houses, Baring Road, for Mr. G. W. Crosby; four houses, Manor Lane, for Mr. A. E. Thomas; house, The Drive, Sydenham, for Messrs. C. H. Gibson, Ltd.; house, Cambridge Road, for Le Blond, Ltd.

In connection with the erection of 3,500 houses, the L.C.C. Housing Committee has considered the question of roofing, and recommends British tiles, although the cost will be £5. 17s. 6d. per house extra.

Plans passed at PURLEY: House, Highfield Road, for Mr. E. A. Matthews; house, Higher Drive, for Mr. G. Kitcat; house, Hartley Old Road, for Mr. Walter Cottage; house, Copse Hill, for Mr. J. G. Cooper; builder's offices and flats, Brighton Road, for Messrs. C. H. Gibson, Ltd.; three houses, Hartley Down, for Mr. F. A. Freeman; two houses, Green Lane, for Mr. W. R. Roach; house, Hartley Old Road, for Mr. F. A. Freeman; house, Copse Hill, for Messrs. Nicholls and Hughes; motor showrooms and flats, Brighton Road, for Caterham Motor Co., Ltd.; four houses, Northwood Avenue, for Mr. T. A. Parker.

The Surrey Education Committee is acquiring a site at SANDERSTEAD, for secondary school purposes.

Plans passed at SANDERSTEAD: House, Purley Bury Close, for Mr. W. J. Frewing; house, Mitchley Avenue for Mitchley Wood Estate, Ltd.; house, The Ridgeway, for Mr. F. L. Phillips; ten houses, Briton Hill, Downsway and Briton Crescent, for Mr. H. P. Hawkes; four houses, Addington Road, for Messrs. Crowley Bros.; house, Church Close, for Mr. Frank Flood; house, Kingswood Way, for Mrs. A. B. Poore; shop, St. Mary's Road, for Messrs. W. and R. Barrs; tea-rooms and house, Addington Road, for Mrs. Tulett.

The SHOREDITCH B.C. Health Committee recommends the provision of a women's hospital, in connection with the municipal health and maternity scheme.

The ST. PANCRAS B.C. has obtained sanction to borrow £17,660 for the erection of twenty-two flats and five shops, and also for a tuberculosis dispensary and a maternity and child-welfare centre, at Camden Road.

SOUTHERN COUNTIES

Plans passed by the DARTFORD U.D.C.: Conversion to business premises, 64-66 Lowfield Street, for Mr. H. C. Elliott; bungalow, Baldwyn's Estate, for Mr. J. S. Brinkworth; house, Pilgrim's Way, for Mr. C. Gillam; bungalow, rear Havelock Road, for Mrs. A. Bray; hall, Westgate Road, for Pastors T. J. and G. Gunter; two houses, Brentfield Lane, for Mr. W. F. Summers; bungalow, Havelock Road, two houses, Dartford Road, and two houses, Princes Road, for Mr. G. H. Giles; seven garages, Rochester Road, for Messrs. W. J. Draper and Son.

The PORTSMOUTH Education Committee has prepared a scheme for extensions at the Municipal College, at a cost of £45,000.

The PLYMOUTH Corporation is being asked to consider the acquisition of property adjacent to the market, the reconstruction of the market thereon, and the development of the present market site as a high-class shopping centre.

Plans passed by the PLYMOUTH Corporation: Two houses, Brandreth Road, for Mrs. G. Lazarus; alterations, 7, 8 and 9 The Octagon, for Messrs. Jays, Ltd.; two houses, Old Walls Estate, for Messrs. A. E. Searle and Son; twelve houses, Dale Gardens, for Mr. W. H. Joyce; two houses, Berrow Park Road, for Mr. J. F. Woodley; two houses, Venn Grove, for Mr. J. H. Dyer; alterations, 2 and 3 Union Street, for Prices Tailors (1928), Ltd.; alterations, 54 and 56 Mutley Plain, for Messrs. B. Taylor & Co.; warehouse, Central Street, for Service, Ltd.; pump station, Cattedown, for Cattedown Wharves, Ltd.

The PORTSMOUTH Corporation has under consideration re-housing schemes for the Portsea district.

The PORTSMOUTH Corporation has prepared a scheme for the proposed aerodrome at Highgrove, at a cost of £65,000.

Plans passed by the PORTSMOUTH Corporation: Alterations, 157-159 Fratton Road, for Portsea, Island Mutual Co-operative Society, Ltd.; additions, Parish Hall, Kingston Road, for the Parochial Church Council of St. Stephen's Church; forty-eight houses, Highbury Estate, Cosham, for Messrs. G. and W. Mitchell; six houses, Compton Road, for Mr. V. Dye; alterations and additions, Greetham Street, for Messrs. M. Cook and Sons, for South Hants Produce Co., Ltd.; extension to factory, 37 St. Thomas Street, for Messrs. Barrell, Ltd.; two houses, Battenburg Avenue, for Mr. H. Dye; twenty-eight houses, Money Fields, for Mr. R. J. Winnicott; two shops, High Street, Cosham, for Messrs. A. E. Porter; workshop, Cressy Place, for Messrs. E. and A. Sprigings, for Brunswick Dyeing and Cleaning Co., Ltd.; thirteen houses, Amberley Road, for Mr. V. Kidd; additions, 18 Spring Street, for Portsea Island Mutual Co-operative Society, Ltd.; additions, Restaurant, The Hard, for Messrs. Jno. Croad, Ltd.; house, Pleasant Road, for Messrs. Howe and Bishop.

Plans passed at POOLE: Dwelling house, Wimborne Avenue, for Messrs. Willmott Bros.; four dwelling-houses, Sunnyside Road, for Mr. S. E. Bracher; dwelling-house and garage, Links Road, for Messrs. Walter Hoare and Sons; dwelling house, Coy Pond Road, for Mr. C. C. G. Osborne; dwelling-house, Harbour Hill Road, for Mr. F. W. Spratley; garage, off Fernside Road, for Mr. E. de Wilde Holding; dwelling-house, corner Boulnois Avenue and Frankland Crescent, for Mr. E. F. Knight; dwelling house and garage, Mayfield Avenue, for Mr. H. Ventress; block plan of proposed lodge, Lawrence Drive, for Messrs. Mackenzie and Phillips; dwelling-house, Gloucester Road, for Messrs. Philpotts and Manners; dwelling-house, Brixey Road, for Mr. A. G. Gray; extension to shop, Poole Road, for Mr. E. C. Markby; dwelling-house, Compton Avenue, for Mr. W. B. Chinchen; dwelling-house, off Livingstone Road, for Mr. M. J. Lawford; garage addition to dwelling-house, Brownsea View Avenue, for Mr. and Mrs. F. Adams; dwelling house, Stanfield Road, for Mr. D. Thomas; two dwelling-houses, North Road, for Mr. J. Allner; dwelling-house and garage, corner Alton Road and Luscombe Road, for Mr. T. E. Grimes; dwelling-house, Hennings Park Road, for Messrs. S. Whitelock & Co.; dwelling-house, Banks Road, for Mr. W. B. Chinchen; dwelling-house, Cynthia Road, for Mr. W. Toop; garages (nine), workshop, office and store, Globe Lane, for Messrs. Storrar and Hunt; pair semi-detached dwelling-houses, Stanley Green Road, for Mr. H. G. Hawkins; dwelling-house and garage, Western Avenue, for Mr. A. Barnes; six lock-up shops and offices with eight dwelling-houses over, Banks Road, for Messrs. Rumsby and Rodd; dwelling-house and garage, Houlton Road, for Mr. T. J. Boys; dwelling-house, Frankland Crescent, for Mr. B. C. Short; dwelling-house, Twemlow Avenue, for Mr. A. N. Patterson; dwelling-house, Enfield Road, for Messrs. L. J. Newell and Sons; dwelling-house, Houlton Road, for Mr. F. Jones; dwelling-house, Uppleby Road, for Mr. R. C. Webber; dwelling-house, Springfield Crescent, for Mr. L. V. Villar; dwelling-house and garage, Springfield Crescent, for Mr. F. H. Butler; garage, "Surrey Court," Surrey Road, for Messrs. G. Shears and Sons, Ltd.; shop and dwelling-house, corner Ringwood Road and Kingston Crescent, for Mr. G. Shears; dwelling-house, Guest Avenue, for Mr. A. C. Parish; office and stores, Ringwood



A brick and tile house at Reigate, Surrey. Designed by C. E. Salmon. The main front. For ground- and first-floor plans, see page 481.

Road, for Mr. F. G. Nutt; dwelling-house, Houlton Road for Mr. E. Houlton; six dwelling-houses, Gloucester Road, and pair of semi-detached dwelling-houses, Gloucester Road, for Messrs. Phillpotts and Manners; dwelling-house, Caledon Road, for Mr. H. Ventress; dwelling-house, Evering Avenue, for Mr. N. Newman; dwelling-house and garage, Banks Road, for Mr. E. de Wilde Holding; dwelling-house, Good Road, for Mr. E. G. Brackstone; dwelling-house and garage, Links Road, for Mr. E. F. Knight; dwelling-house and shop, corner of Alder and Sheringham Roads, for Mr. F. J. Walsh; garage, "Fairways," Compton Avenue, for Mr. J. Hewitt; two garages, Lake Road, for Mr. A. C. Short; garage, rear "Hillingdon," Brunstead Road, for Mr. A. Clarke; garage, "Wykeholm," St. Mary's Road, for Mr. J. E. Tarrant; garage, rear of shop, Poole Road, for Messrs. S. Whitelock & Co.; garage, "Belville," Manor Avenue, for Mr. M. J. Lawford; garage, "Braidley," Cliff Drive, Canford Cliffs, for Mrs. M. F. Darrock; garage, Anthonys Avenue, for Mr. W. B. Chinchen; garage, rear "Woolcot," Flaghead Road, for Messrs. Burt and Vick; garage, Harbour Hill Road, for Mr. A. Hannam; garage, off James Road, for Mr. L. C. Montague; garage, rear "The Brow," Harbour Hill Crescent, for Mr. W. J. Palmer.

SOUTH-WESTERN COUNTIES

The PAIGNTON U.D.C. is seeking sanction to borrow £262,240 for sewerage and sewage-disposal works.

The PAIGNTON U.D.C. has decided that the proposed concert pavilion on Paignton Green should be large enough to accommodate 2,000 persons.

Plans passed by the PAIGNTON U.D.C.: House, Leighon Road, for Mr. J. Evans; two houses, Osney Crescent, for Mr. R. W. Barnes; bungalow, Barnfield Road, for Messrs. Wallis, Underhay & Co.; six houses, Blatchcombe Lane, for Mr. H. T. Drew; new cul-de-sac road, off Hilton Drive, for Mr. H. Proctor; two houses, Shorton Lane, for Mr. F. Binmore; bungalow, off Tweenways Lane, for Messrs. Unity Builders, Ltd.; house, The Grove, Yalberton, for Mr. A. E. Wills; bungalow, Cecil Avenue, for Mr. F. Binmore; shop, St. Michael's Road, for Mr. W. G. Tancock; additions and alterations, Marine Hotel, Adelphi Road, for Mr. J. T. Roach; two houses, Clennon Rise, for Mr. L. A. Willmott; four houses, Colin Road, for Mr. J. A. Endacott; four houses, Laura Grove, for Mr. H. Proctor; bungalow, Dartmouth Road, for Miss M. L. Shepperd; twenty-one houses, Marldon Road, for Mr. A. Jonas; sixteen houses, Sea View Crescent, for Mr. H. Proctor.

Plans passed by the WEYMOUTH Corporation: House, Clearmount Road, for Mr. A. C. Jarrams; additions, 10 Hardwick Street, for the Weymouth and District Co-operative Society, Ltd.; booking office, Esplanade, for Messrs. S. Jackson and Sons; alterations to shop, St. Thomas Street, for Messrs. J. A. Parsons and Sons.

MIDLAND COUNTIES

The BIRMINGHAM Education Committee is to provide schools at Dulwich Road, Twickenham Road and Trescot Road, at a cost of £123,500.

The BIRMINGHAM Corporation is acquiring Kettlehouse Farm, comprising 162 acres of land, Perry Bar, for housing purposes.

The BIRMINGHAM Education Committee has selected school sites on the Ward End Hall estate and Bushmore Farm estate.

The BIRMINGHAM Corporation has obtained sanction to borrow £10,550, for the reconstruction of engineering equipment at Winson Green Mental Hospital.

The BIRMINGHAM Corporation is to provide further accommodation for nurses at Little Bromwich Hospital, and revise the ward accommodation, at a cost of £19,500.

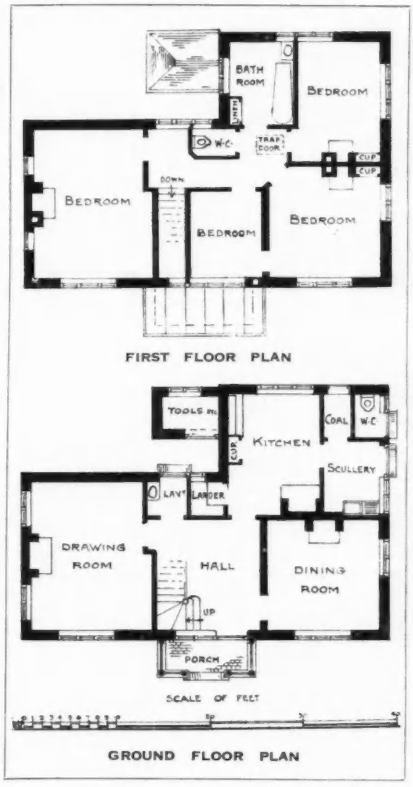
The BIRMINGHAM Corporation has granted the following building leases: Birches Green and Pype Hayes Ex-service and Social Club, Mingsbury Road, for a club; Messrs. T. W. Smith and Son, land in Kingsbury Road; Mr. C. F. Price, land in Stoney Lane and Blakesley Road, Hardley; Ansells Brewery, Ltd., land at the corner of Warren Farm Road and College Road, Perry Barr, for the erection of a public-house.

The BIRMINGHAM Education Committee's estimated expenditure on school buildings during the year is £338,000.

The BIRMINGHAM Education Committee is to proceed with the erection of an elementary school at Trescott Road, Northfield, at an estimated cost of £31,500. The building will accommodate 768 pupils.

The BIRMINGHAM Corporation has obtained sanction to borrow £32,000 for the erection of public baths at Sparkhill.

The BURTON-ON-TRENT Corporation Housing Committee has approved the layout plan, submitted by the borough surveyor, for the erection of 143 houses on the Horninglow Road site and has received sanction to borrow £12,790 for the erection of twenty-eight houses on the Anglesey Road site.



House at Reigate, Surrey. Designed by C. E. Salmon. Ground- and first-floor plans.

The WALSALL Corporation is to construct a new 50-ft. road to Bescot Station from New Mills, crossing the Ring Road and Wallows Lane, encircling the Sewage Farm, and terminating at Brockhurst House, at a total estimated cost of £32,000.

NORTHERN COUNTIES

The Cheshire county surveyor has prepared plans for the erection of a swing bridge at ACTON, at a cost of £50,000, and for roadwork, at a cost of £40,000.

The ALTRINCHAM U.D.C. has prepared a scheme for the widening and reconstruction of the bridge over the Bridgewater canal, at a cost of £20,600.

The BILLINGHAM U.D.C. has obtained sanction to borrow £12,700, for the erection of new council offices.

The BIRKENHEAD Corporation has obtained sanction to borrow £7,913 for the provision of fifteen flats on the old County police-court site in Abbey Street.

The BIRKENHEAD Corporation is seeking sanction to borrow £9,000, for the erection of an additional ward pavilion at the infectious diseases hospital.

The Durham County Education Committee is seeking sanction for a loan of £7,200 for the erection of an elementary school in Etherley Lane, BISHOP AUCKLAND.

The BOLTON Corporation has asked the borough engineer to prepare a scheme for dealing with properties in the Sidney Street area.

The BOLTON Corporation has obtained sanction to a loan for the purchase of forty-eight acres of land at Hall-in-the-Wood, for a housing scheme.

Plans passed by the BOLTON Corporation: House, Stapleton Avenue, for Mr. George Fell; twelve houses, Park Road, for Mr. Wilfred Andrew; house, Wigan Road, for Dr. Alex. Reid; layout, streets and levels, Eastbank, off New Church Road, for Messrs. T. P. Smith, Ltd.; streets and levels, off Plodder Lane and Salford Road, for Bridgewater Estates, Ltd.

The BRADFORD Corporation is to obtain twenty acres of land at Odsal, for a housing scheme.

The BRADFORD Education Committee has selected a site on the White Abbey area, for the erection of a nursery school.

The Brighouse Industrial Society, Ltd., is to erect shops in Griffe Road, Wyke, BRADFORD.

The BRADFORD Education Committee is to obtain a site for the erection of an infants' school at Shirley Manor.

The BRADFORD Corporation has granted the following applications for permission to develop estates: Mr. F. Wray, houses and lock-up garages in Beacon Road and Beldon Lane; Mr. W. Wells, houses in Westfield Lane, Idle; Mr. H. Robinson, lock-up garages in Westbrook Place Longside Lane.

The BRADFORD Corporation Improvements Committee recommends that Mr. C. Cowles-Voysey, F.R.I.B.A., who was the author of the first design in the recent competition for the development of the central area scheme, be appointed as architect for the construction of the buildings.

The BRADFORD Corporation has decided to erect single-room dwellings on a site at Bierley, and has instructed the city architect to submit a layout plan in connection with the proposal. The Corporation has also approved a layout plan, submitted by the city architect in respect of the Chellow Grange housing site.

Messrs. Martins Bank, Ltd., are to erect premises at Bramhall, CHESHIRE.

The District Bank is to erect premises at Halze Grove, Poynton, CHESHIRE.

The CHESTERFIELD Education Committee has instructed the architects to prepare preliminary plans for the reconstruction and additions at Old Whittington schools and New Whittington schools.

Plans passed by the CHESTERFIELD Corporation: Two cottages, Sydney Street, and two cottages, School Board Lane, for Miss E. Clarke; additions, Chatsworth Lane, for Messrs. Robinson and Sons, Ltd.; extension to Picture House, Holywell Street, for the Picture House, Ltd.; shops, Vicar Lane, for Mr. A. Swale; house, Brookside, for Mr. A. Heath; house, Brookside for Miss Coates; two houses, Rhodes Avenue, for Mr. A. Needham; new central hall, Cross Street, for R.C. School Managers; house, Rhodes Avenue, for Mr. H. Wholey; additions, Chatsworth Road, for Messrs. Robinson and Sons, Ltd.

The CONSETT U.D.C. is preparing a scheme for the erection of fifty-eight more houses.

The Durham County Education Committee has purchased a site at CROOK, for the erection of an intermediate school for about 893 pupils.

The LEEDS Corporation has decided to purchase fifteen acres of land off Osmondthorpe Lane, for housing purposes.

The LEEDS Corporation is considering the utilisation of land in Compton Road, for the erection of baths and washhouses.

The LEEDS Corporation is to extend the Rodley sewage works at a cost of £24,360, in accordance with the scheme of Mr. E. H. Howatson.

The LEEDS Corporation is offering a site on the York Road housing estate to the Yorkshire Association of Baptist Churches, for the erection of a church and Sunday school.

The Durham County Education Committee is seeking sanction to borrow £6,000, for the erection of an elementary school at MARSDEN.

The ROTHERHAM Education Committee has purchased land adjoining Park Street and Clough Road, for the purpose of erecting a new central school.

Plans passed by the SOUTH SHIELDS Corporation: Shop and store, Vincent Street, for Messrs. Hanlons, Ltd.; paper store, Derwentwater Lane, for Mr. Howard Hill; extension, "Volunteer Arms," Cambridge Street, for Mr. F. W. Newby; bungalow, St. Peter's Avenue, Harton, for Messrs. J. H. Morton and Son; fifteen tenement dwellings, Hardings Bank, for the Riverside Tenants Co.

The SOUTH SHIELDS Education Committee has received final approval of the plans of the projected new junior schools at Cleadon Park, at a cost of £21,800.

The SOUTH SHIELDS Watch Committee has adopted revised plans, prepared by Mr. Page, for the new fire station and alterations at the police buildings, at a cost of £12,000.

The STOCKTON-ON-TEES Education Committee has purchased a site for the erection of a secondary school.

The Otley U.D.C. is to purchase a site for the erection of 100 houses at WESTBOURNE.

MISCELLANEOUS

Messrs. Mactaggart and Mickel, Ltd., are to erect twenty-six bungalows at Menock Road, Cathcart, GLASGOW.

Plans passed by the NEWPORT (I.O.W.) Corporation: Alterations, "Row Barge," Pyle Street, for Mr. F. J. T. Mew (architect); additions to offices, Nodehill, and auction mart, South Street, for Messrs. Stratton and Millgate (architects); garage and offices, Pyle Street, for Mr. F. Chiverton (architect); two bungalows, Beech Road, for Mr. W. Basterfield.

The Council of the University College of Swansea has decided to erect a sports pavilion at Singleton, SWANSEA, and has appointed Mr. Glendinning Moxham, F.R.I.B.A., of Swansea, to carry out the work.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B_1	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor ..	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B_1	Chatham ..	S. Counties	1 4½	1 0½
B_1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate ..	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3 0	*Trailer*	£0	15 0
3-ton motor lorry	3	15 0	*Steam roller*	4	5 0
Steam lorry, 5-ton	4	0 0	*Water cart*	1	5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	1 17 6
DO. 6-2-1, per yd. cube	1 12 6
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 14 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4 5 6
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9½ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 5 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	

Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30 0 0
DO. in cement do., per rod	32 10 0
DO. in stocks, add 25 per cent. per rod.	
DO. in blues, add 100 per cent. per rod.	
DO. circular on plan, add 12½ per cent. per rod.	
DO. in backing to masonry, add 12½ per cent. per rod.	
DO. in raising on old walls, etc., add 12½ per cent. per rod.	
DO. in underpinning, add 20 per cent. per rod.	
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side, per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in., per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.
PLAIN face Portland basis, per ft. sup. £0 2 8
DO. circular, per ft. sup. 0 4 0
SUNK FACE, per ft. sup. 0 3 9
DO. circular, per ft. sup. 0 4 10
JOINTS, arch, per ft. sup. 0 2 6
DO. sunk, per ft. sup. 0 2 7
DO. DO. circular, per ft. sup. 0 4 6
CIRCULAR-CIRCULAR work, per ft. sup. 1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run 0 1 1
DO. circular, do., per ft. run 0 1 4
HALF SAWING, per ft. sup. 0 1 0
Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.
SETTING 1 in. slate shelving in cement, per ft. sup. £0 0 6

RUBBED round nosing to do., per ft. lin. £0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed 1 7 6
YORK SILLS, W. & T., ft. cub. fixed 1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup. 0 1 3
DO. 2½ in. thick, per ft. sup. 0 1 6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies				£14	0 0
Countess				23	0 0
Duchess				32	10 0
Old Delabole	*Med.*		*Grey*	*Med.*	*Green*
24 in. × 12 in.	£42	11	3	£45	1 0
20 in. × 10 in.	31	4	3	33	0 6
16 in. × 10 in.	20	18	0	22	4 9
14 in. × 8 in.	12	1	0	12	16 3

Green Randoms, per ton	8 3 9
Grey-green do., per ton	7 3 9
Green peggies, 12 in. to 8 in. long, per ton	5 13 9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 2 2
Cement and sand, see "Excavator," etc., above.	
Hand-made tiles, per M.	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
DO. *Peggies, per ton*	7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med.	*Grey*	*Med.*	*Green*
24 in. × 12 in.	£5	0 0	£5	2 0
20 in. × 10 in.	5	5 0	5	10 0
16 in. × 10 in.	4	15 0	5	1 0
14 in. × 8 in.	4	10 0	4	15 0

Green randoms	6 7 0
Grey-green do.	5 9 0
Green peggies, 12 in. to 8 in. long	4 13 6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3 17 6
DO., machine-made do., per square	3 7 6
Vertical Tiling, including pointing, add 18s. 0d. per square.	
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 4 6
DO. *T. and G., 1 in., per sq.*	1 4 6
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 6
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 2
DO., *ft. cube*	0 14 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube 0 4 6
DO. framed in floors, roofs, etc., per ft. cube 0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube 0 8 6
PITCH PINE, add 33⅓ per cent.
FIXING only boarding in floors, roofs, etc., per sq. 0 13 6
SARKING FELT laid, 1-ply, per yd. 0 1 6
DO., 3-ply, per yd. 0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq. 2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run 0 0 4½
DO. 9 in. wide and over per ft. sup. 0 1 2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ¾ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup., per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

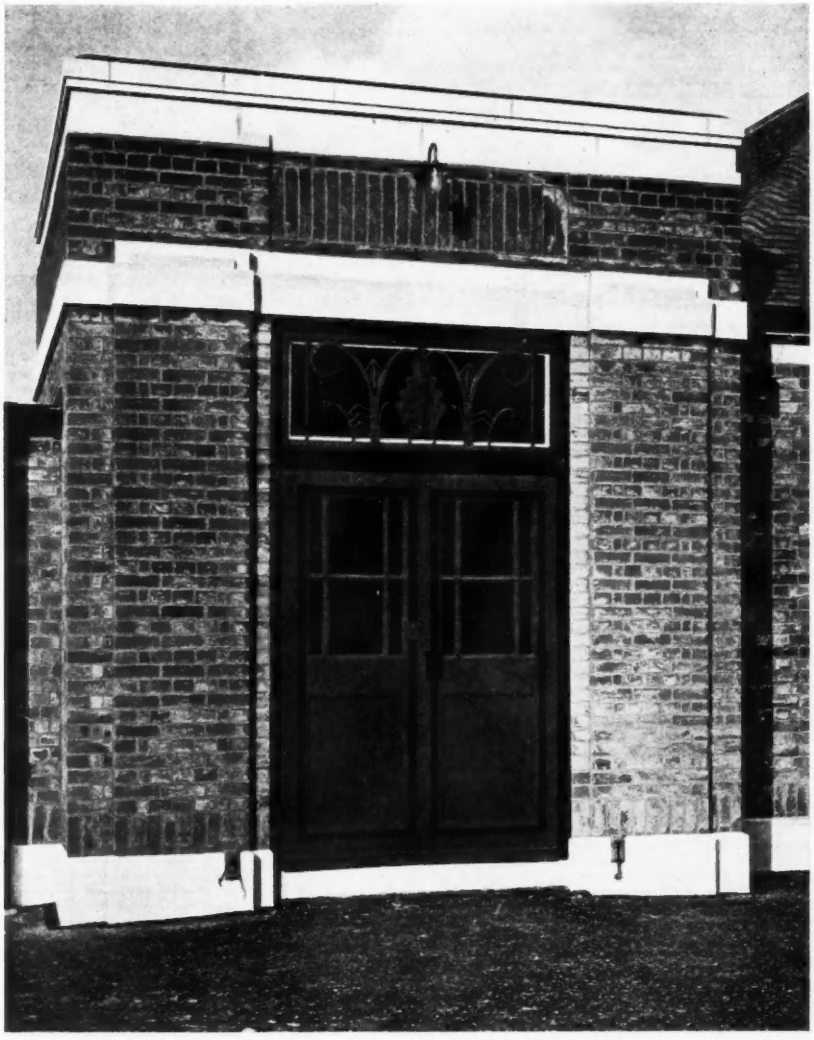
SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

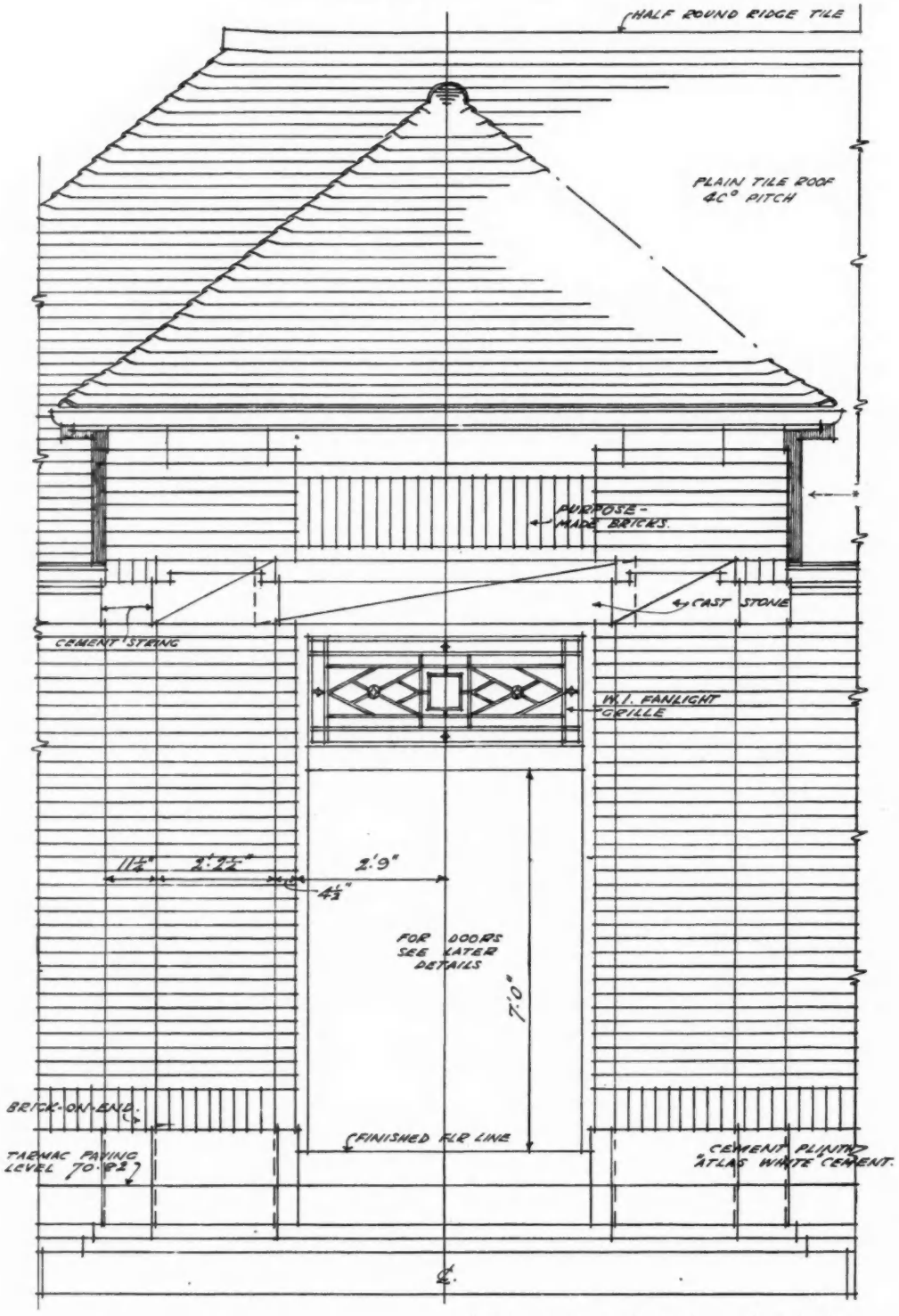
PLYWOOD, per ft. sup.

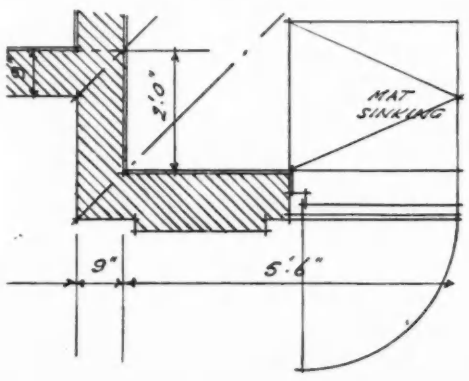
Thickness	1/16 in.			¼ in.			⅜ in.			½ in.		
Qualities	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B d.	AA. d.	A. d.	B d.
Birch	4	3	2½	5	4	3	7½	6	4½	8½	7	6
Alder	5½	3	2	5	4	3	6½	5½	4	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 9	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—



ENTRANCE DOORWAY, ELEMENTARY SCHOOL, NEW WINDSOR, BERKS.
By
LEATHART AND GRANGER

THIS main entrance doorway is one of four in the new school which is being opened today by the Rt. Hon. Sir Charles Trevelyan, Bt., M.P., President of the Board of Education. All the doorways and grilles are of the same architectural design, and are finished in green, picked out in black. An interesting variation, however, occurs in some cases at roof-level—the substitution of overhanging eaves (see the architects' detail drawing overleaf) in place of the parapet wall. Further views of the school appear on pages 498–505.





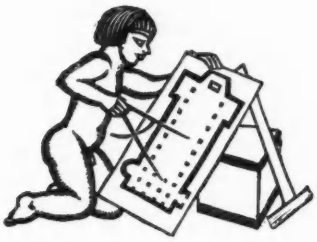
* Leadwork to be read as soakers and not dressings over tiles as shown.

ENTRANCE DOORWAY, ELEMENTARY SCHOOL, NEW WINDSOR

Designed by
LEATHART & GRANGER

[*For photograph see previous page.*]

THE ARCHITECTS' JOURNAL



WEDNESDAY, MARCH 26, 1930

SLUMS

" A certain squalid knot of alleys
where the town's bad blood once slept corruptly."

ROBERT BROWNING: *Christmas Eve.*

THE ordinary middle-class person who quietly pays for most of the social work that is done in the towns today knows very little about life in the slums or its evils. As his train to the City does not stop at that kind of station, and the hoardings along the line conceal most of the hinterland, perhaps he is not to blame—for where else could he afford to give his mind to the cure of such remote evils? Some photograph or article in his paper may carry him behind those hoardings for a moment on his morning journey; in the evening it is dark, and quite naturally he dozes. The problem is therefore taken up by those who have to work in the slums—doctors and officials—and by those with money whose social consciousness gives them no rest.

The slum problem has become that kind of thing that is perpetually discussed at conferences, and gradually the accumulation of " resolutions " and " demands " is having concrete effect. The problem has been approached from several points of view, the sociological, since it started the whole movement for slum abolition, taking first place.

Quite properly, professional and other social workers ask why, now that there are so many facilities for the poorer classes—schools, primary, secondary and technical, free libraries, museums and art galleries, hospitals, clinics and day nurseries, swimming baths and public parks, and even free music—decent housing was not established many years ago; adequate housing that would have lessened the need for some of the social and medical services which cost us so much now. There is no pleasant reply; the reason is that improved housing conditions on a sufficiently large scale seemed to be too radical a problem to be attacked directly, too upsetting to established systems of ownership, and our fathers and grandfathers therefore placed a fence at the bottom of the cliff instead of the top, so that those who fell over would at any rate be saved from drowning, even if a leg or two were broken on the way down.

For many years we have increased the number of palliatives to cope with the evils arising from poor housing, and yet the situation, until recent efforts stemmed the tide, has continued to grow more and more unpleasant. Elsewhere it is apt to be different. A glance at the nineteenth-century housing adjoining Copenhagen Docks, for instance, reveals our contemporary shortcomings with damaging candour.

The picture, however, must not be painted too black, for much valuable and interesting rehousing of slum populations has taken place in recent years in England and Scotland. It is divided broadly into two groups — new houses and tenements, and reconditioned " blocks." Of the former, little need here be said, for in every big town housing schemes have been created, and they have been illustrated often in these pages. Reconditioning (i.e. the use of existing buildings, largely replanned and refitted) is less prominent and less easy to discover. The reconditioning of country cottages as a means of abolishing rural slums has received considerable publicity, but the work done in urban districts—examples from Edinburgh are given in this issue—is in larger units and is equally interesting and often demands far greater ingenuity. Sometimes it is frowned upon; and indeed no amount of newly-installed plumbing will do away with that chief evil of slums, the overcrowding of children, as long as families of more than four or five are allowed to occupy two-roomed flats or " houses "—but these, one hopes, are only the results of temporary pressure; the two-roomed flats are often excellent in themselves and ingeniously evolved from existing buildings, and as the number of large families is decreasing the abuse of their amenities by overcrowding will probably diminish.

The two key points in slum abolition are the removal of the evil of the overcrowding of children and the provision of adequate accommodation at a rental within the means of those for whom it is intended, and it is likely that the present Government will attempt to deal with the problem of housing large impoverished families by some system of rent rebates based on the number of children involved, so that large families may afford to occupy sufficiently large houses. Anyone who has read a medical officer of health's report on overcrowding will examine the proposals with sympathetic interest, provided that undue encouragement is not given to those who rear large families when unable to bear the expense of their upbringing.



CRAIG'S COURT, WHITEHALL, WITH HARRINGTON HOUSE: FROM A DRAWING BY P. M. STRATTON.

The increased width of so many London streets is giving a fresh artistic value to the narrow lanes and small squares. Craig's Court, for instance, is more precious to true Londoners now than it was when Canaletto painted his picture of Whitehall (hung in the Italian Exhibition) which shows not only half the road blocked by the old gateway to Whitehall Palace, but a highly congested neighbourhood on the east of the road. Further, the amplitude of Trafalgar Square makes Craig's Court seem very snug and intimate to us, though Craig himself be a nobody in limbo. Probably he built Harrington House, on the right hand of the drawing, and formed the courtyard in front; this all became Lord Harrington's property later, and so remained till 1916, a convenient town lodging from which his Lordship rode on horseback to the Park.

Then "Cox's," suddenly expanded by the war, moved into the house with a flutter of paper forms and a huge stove which they fixed against the famous wooden staircase with an incendiary's zeal for heat.

After the war, the Post Office bought the building and, since it had been scheduled as a monument worthy of preservation, the Office of Works saved the front and the hall. A new story was added and screened by a new roof.

The addition facing us in the drawing has been conceived as a separate design, lightly modelled to act as a foil to the gross and hearty ordonnance of the old mansion. It is the spirit of the latter which dominates the Court, for it is effective in its rough-and-ready way. To distribute the weight of one of the floors, a tree trunk was chosen, which forked at one end on to its wall. [P. M. S.]

NEWS & TOPICS



Raymond McGrath, winner, as regards the bedroom and dining-room, of the recent competition for interior designs, organized by The Daily Mail *and the General Electric Company: the rooms are shown at the Ideal Home Exhibition at Olympia.*

WARNING !

THE Select Committee which is to consider the Charing Cross Bridge Bill was expected to begin its work yesterday, Tuesday, March 25th. Now is the time for all good men to come to the aid of the party !

THE SOUTHERN RAILWAY'S CHANCE

Cheers greeted the plea of Sir Samuel Hoare, at the annual meeting of the London Society, that pressure should be brought upon the Southern Railway not to build yet another terminus in South London, but to amalgamate it with Waterloo. As he pointed out, New York having successfully concentrated its lines into two main termini, with electrical haulage through the tunnels connecting to the trunk lines, here is obviously the place and the opportunity to lead a reform on the same lines. It is to be hoped that this alternative to the dreary, dismal, uneconomical arches of the official scheme will be stressed before Sir Henry Cautley and Messrs. J. S. Wardlaw-Milne, Andrew MacLaren and Guy Rowson, who form the present Parliamentary Committee.

THE VALUE OF ART TRAINING

High aspirations were voiced by the President at the recent banquet of the Royal Institute of Painters in Water Colours. Sir David Murray referred with gratification to the approaching intention of the Board of Education to make the teaching of art part of the training of the schools—a course often advocated in these pages. If a man of Sir David's standing could describe friendship and art as "the two greatest boons in life," access to the boon of art should assuredly not be withheld from any boy or girl in the land—*pace* Lord Birkenhead's opinion that "there was enough waste of public money today without recommending profligate expenditure in teaching people to draw who never could draw." Supposing that they never will draw, what then? Will his lordship deny that they will at least have been given what is quite as important—the opportunity of acquiring the first principles of good taste ?

★

Sir David's observation that it was art that developed true love of Nature, not *vice versa*, was a profound one, and his plea that the thousands of spectators who crowded to the late Exhibition of Italian Art might be influenced to visit, occasionally, our free art galleries, was most timely. Only by such courses as he advocated can we hope to arrive at a condition of civilization wherein the ordinary member of society will have absorbed a working knowledge of what architecture really means, and so come to demand the fruit of the architect's laborious training. From that elysian state we are far enough removed, as yet, Heaven knows !

CONSERVATIVE ENGLISH IDEAS

Such was, in fact, the conclusion enunciated by Howard Robertson, at the end of his international bird's-eye review of the state of architecture, in speaking at the Leeds meeting, last week. "There is plenty of architectural talent available in this country," said he, "but it receives most mediocre encouragement." Few can deny the justice of his summing-up of the relative positions in this country and in Germany. Over here we are so much preoccupied with age-old tradition that a truly modern building does really come as a shock. The progressive feeling, across the North Sea, however, does not date from yesterday : a pre-war exhibition at Cologne showed ideas as essentially modern as anything of today. Whatever the ostensible colour of our Government, we remain Conservative in our ideas.

RAYMOND MCGRATH'S CAREER

Raymond McGrath—whose bedroom and dining-room now erected at Olympia are the result of the competition for architects, promoted by *The Daily Mail* and the General Electric Company, and noted, at the time of its inception, in this JOURNAL—is already, at the age of twenty-seven, a designer of fame. For did not he devise the glittering glass interior of "Finella," recently illustrated and described ? He was born at Sydney, Australia, and, originally intending to follow journalism, entered the Faculty of Arts, Sydney University, in 1920. Exchanging into the Faculty of Architecture, he duly graduated as B.Arch., with the University Medal and Wentworth Fellowship to his credit. He arrived in London less than four years ago and, after studying at the Westminster School of Art, entered Clare College, Cambridge, as Research Student of Architecture, in 1927. There, his inclination towards journalism again showed itself: for a time he edited the *Clare College Magazine*. Among his hobbies are wood- and glass-engraving; and his sister is an accomplished Australian sculptor.

MILLBANK'S MILLENNIUM

The rebuilding of Lambeth Bridge has reacted with remarkable celerity upon the queerly assorted district of Westminster of which Horseferry Road is the uncertain backbone. Notwithstanding the fact that this road ends in a jumble of narrow streets leading somehow into Victoria Street, the presence of a great bridge is sufficient to galvanize its decrepitude into activity on a scale commensurate with the rather overwhelmingly grandiose ideas of Lord Melchett and Sir Frank Baines.

★

The Duke of Westminster has recently sold a large block of property lying to the south of Horseferry Road to a syndicate who will develop it in the wholesale manner we have learnt to associate with our rebuilding of London. It cannot pretend to be town planning of the order of Bloomsbury and Mayfair, the last products of ground-landlord development, but it may be organized and coherent street architecture if it is carried out with something of the unified and imposing massiveness of the three great riverside blocks of Imperial Chemical Industries.

ANOTHER IMPOSITION OF BUREAUCRACY

Let us not forget, in the midst of this distressing battle for the life of Charing Cross Bridge, that in another and serious matter bureaucracy appears to triumph over the manifest will of an educated public. The imposition of an official Office of Works' design for the Calton Jail site, arousing at first a storm of resentment in England and Scotland, has at last inflamed something like real anger among those to whom Edinburgh—and, with Edinburgh, Scotland—is something more than a site for Whitehall officials.

★

A letter from the Royal Incorporation of Architects in Scotland to Scottish Peers and Members of Parliament, stating what has on several occasions been given prominence in these columns, goes on to say that "the reiterated statements emanating from the Office of Works have been couched in language of a nature highly disparaging to the architectural profession in Britain," and that "they apprehend one danger, among others—the reduction of the Scottish Capital's architecture to the level of that of an ordinary English town. Towards this disastrous end nothing could contribute more effectively than that outstandingly important buildings in the Capital should be departmentally designed."

★

I see this definite political manœuvring for position on the part of the Office of Works, evidenced in statements seeking to lower the value of the work of private architects, as a sign of weakness which will, I hope, put still further heart in the bodies who represent architects in England and Scotland. We must indeed return to this charge again, and again.

THE "BEAUTIFUL ENGLAND" CAMPAIGN

Most of us have the beauty of England at heart, but few agree as to how to attain our ends. To some, London is the greatest city of the world, with its seven million inhabitants; or is it seventeen now? To others, London is evidence of a lack of organization unparalleled in a civilized country. To some, again, electricity pylons are things to be ashamed of; to others, they are evidence of the power of man, calling for an architectural treatment in keeping with that power. To some, a bungalow is a "growth"; to others, it means the happiness of a family. It is to discuss these questions and many others that the "Beautiful England" Campaign has been organized at the Guildhouse, Eccleston Square.

★

The campaign was opened on March 16 by the Minister of Transport, who gave conclusive evidence of his sympathetic consideration of the countryside. A week has been devoted to towns—the beautiful town and the healthy town; a week is being given to roads, with protagonists of the pedestrians and the motorists giving their views; a week to regional planning and the decentralization of industry; and the final week to modern civilization and the countryside. Among the speakers announced are the Dean of Manchester, Dr. Leonard Hill, Mr. C. E. M. Joad, Mr. George Lansbury, Dr. Raymond Unwin, Mr. Clough Williams-Ellis, Dr. Percy Dearmer, and Dr. Saleeby. These names give evidence that the question of "Beautiful England" is being tackled in a thoroughly scientific manner. It may be stated that there is no intention of adding to the already long list of societies who are struggling to preserve our amenities. The object of the campaign is to back the efforts of those societies. Full particulars can be obtained from the Hon. Secretary, the Guildhouse, Eccleston Square, S.W.1.

£5,000 FOR A REGIONAL PLAN OF MADRID

A novel idea has been adopted in Madrid to encourage regional planning. A Committee of experts has been appointed by the Municipal Council under the chairmanship of the Chief Engineer and the Chief Architect. A prize of £5,000 is offered for the best regional plan submitted, and there are four other prizes of about £400 each for good suggestions. It is interesting to note that one of the chief recommendations of the Committee, in their recently published report, is that the English, or natural, type of park, with trees and landscape features, should be encouraged, rather than the formal garden so popular on the Continent. The Committee further advise that the public should have free access to the pathways and be allowed to walk on the grass. The city is to be zoned, with manufacturing and industrial areas near to the railway stations. The competition is international, and the Municipal Architect at Calle España No. 7, Madrid, will give further particulars.

AMERICAN FLATS IN MOSCOW

Some time ago I noted the appointment of an American firm as consulting architects to the Soviet. Moscow has, in fact, invoked the aid of capitalist America to build even tenement dwellings. This year about £1,000,000 is to be spent in order to try and meet the serious housing shortage. Already, American machinery has been sent to Russia, and Russians are being taught by American building experts how to use the machines. The model tenements will be on the lines of a New York house, six stories high, provided with lifts and central heating. The Moscow City Council have insisted that all the materials and the equipment used must be purchased in Russia. The contractors consider that they can teach the Russians a good deal about plumbing and sanitation generally. Accordingly, an American model flat is being constructed as an object-lesson. I am told that hundreds of persons have gathered together to gaze at the steam shovels and the other machinery used to expedite building operations.

THE IDEAL HOME EXHIBITION

The Ideal Home Exhibition enters upon a new period eclipsing all previous records; for not only has the new addition to Olympia allowed a greater freedom of movement among the exhibits, but these are now expanded to a number so increased that a day's visit is not long enough for anything but a cursory inspection. The appearance of the main hall, its fine spaces flooded with light and colour, and the air vibrating with music have nothing to do with *my* ideal home, but it "catches me where I live," as the Americans have it. Indeed, I could say a lot about the general effect of lighting and colour were it not that the place teems with more particular interest. There are two exhibits that are certain to draw great crowds. One is the Pavilion of Light, wherein electricity and modernity are wedded in the most expensive matrimony: the other is the Room in the Roof—a series of alternative ways of utilizing the old box-room.

ASTRAGAL

CLEARING THE SLUMS OF EDINBURGH

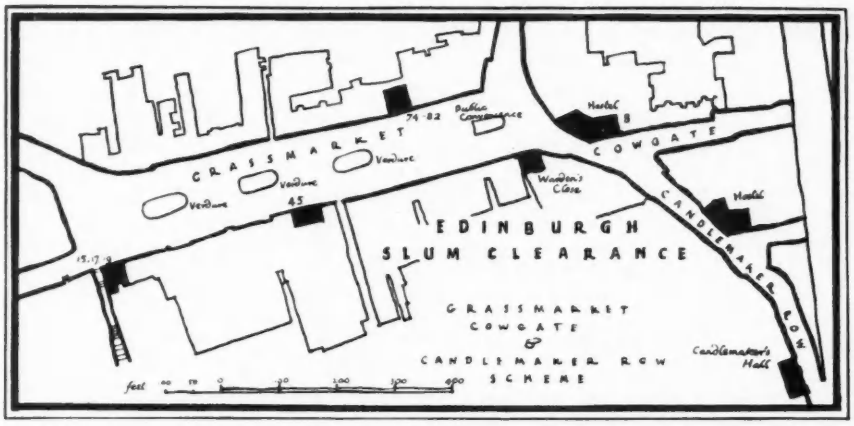


Figure one. Map showing the area of the Grassmarket, Cowgate and Candlemaker Row slum clearance scheme.

Some Typical Reconditioning and Rebuilding Schemes

BY ROBERT HURD

SLUM clearance in most cities involves a wholesale transformation of the area under treatment. In London rows of two- or three-story nineteenth-century dwellings in narrow streets are removed to make room for model tenements from three to five stories high, which house the families on a smaller ground area, giving them greater space in their homes and at the same time playgrounds off the streets for the children.

No one doubts when this change takes place that it is altogether for the better, not only from the point of view of health, but also architecturally, for the exteriors of slum streets rarely have anything to recommend them. The



Figure two. Candlemakers' Hall (the second building from the left of the picture) at the junction of Candlemaker Row with George IV Bridge.

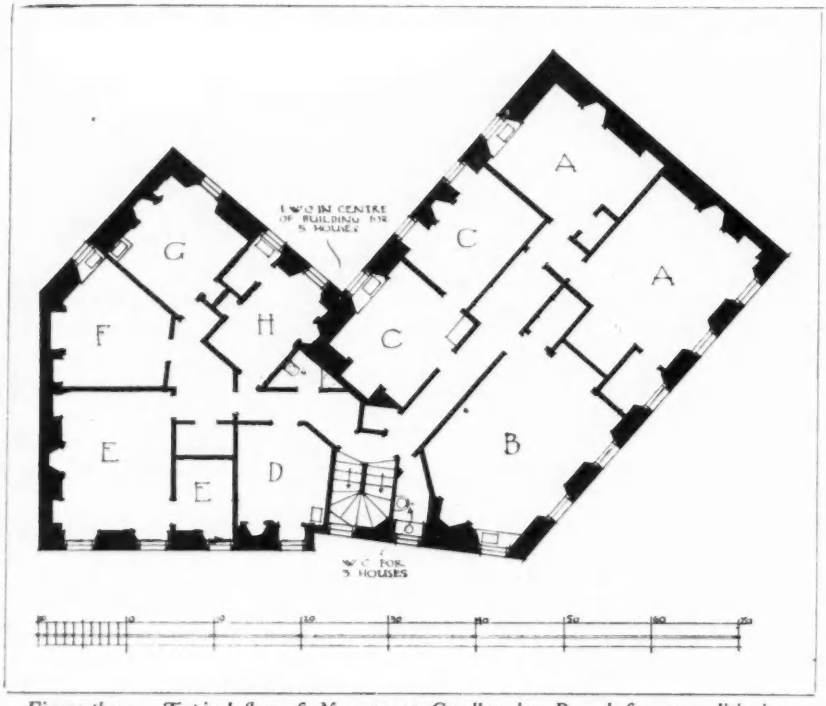


Figure three. Typical floor of Nos. 35-43 Candlemaker Row before reconditioning. A to H denote the accommodation provided for eight families on this floor.

problem is a matter of regrouping the housing accommodation in tenements in the same locality, at the same time providing outside accommodation for surplus population. The main difficulty, only of a temporary nature, is the housing of the tenants while their old homes are being demolished and the site re-used for healthier apartments, planned in blocks of flats.

In Edinburgh the problem is more complicated. To begin with, we are dealing here not with jerry-built nineteenth-century boxes, but with seventeenth and eighteenth-century buildings which are virtually blocks of flats, and always have been, though socially they have more than come down in the world. Before the Union in 1707, and previous to the development of the area beyond Princes Street, the more aristocratic members of society lived on the lower floors of these tall six-floor buildings in the Old Town—in the Grassmarket, in the Canongate, and so on; but when the seat of government shifted to London, and the streets of the West End started to arise, the Old Town was deserted by the wealthy and so fell gradually into decay, for the poorer classes who had previously occupied the upper floors of these

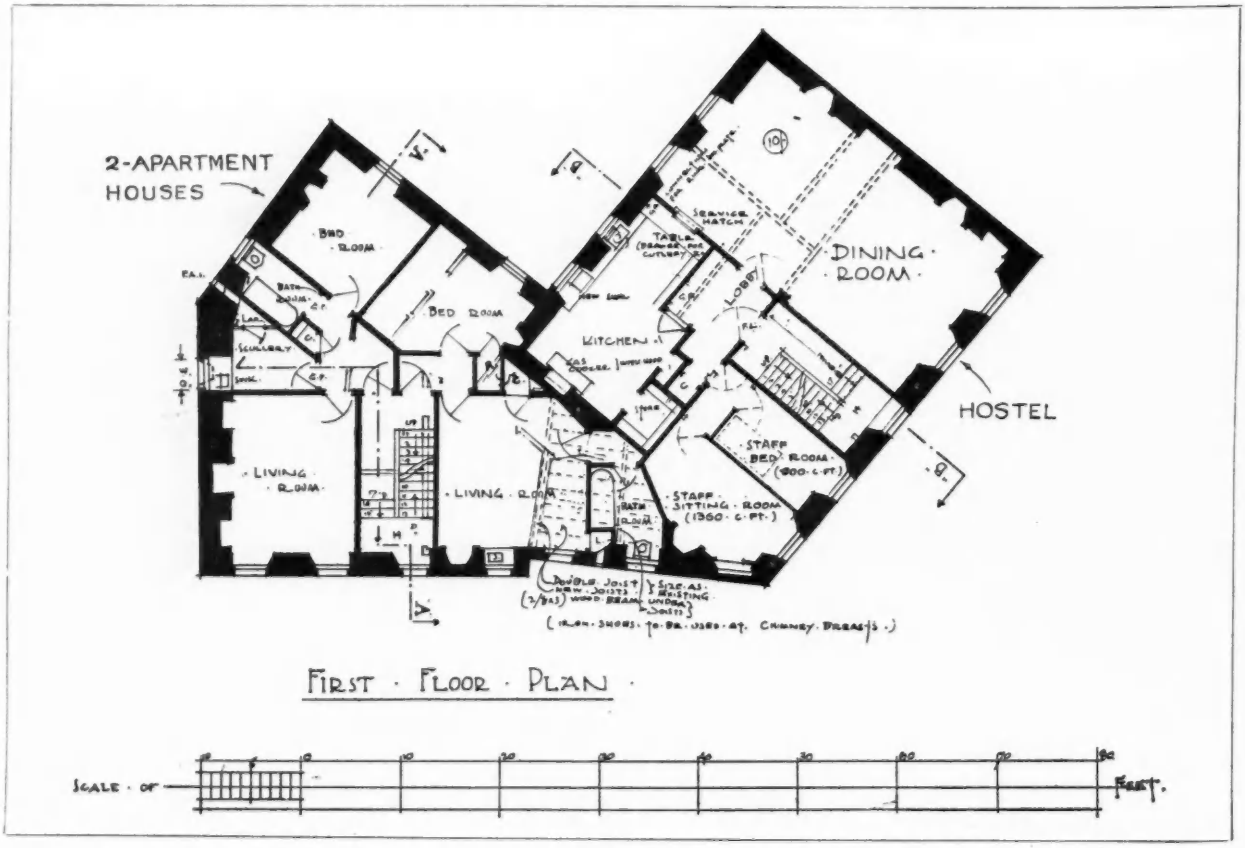


Figure four. Plan of a typical floor of Nos. 35-43 Candlemaker Row after reconstruction and partial adaptation into a women's hostel.

blocks now spread to all the floors, with the result that the squalor, originally limited to the attics, began to display itself at the very gates of Holyrood House. This process has affected the whole of the Old Town, and matters have continued to go from bad to worse for so long that the living conditions in some of the buildings have to be seen by the ordinary person to be believed.

As these buildings were originally erected in flats, it is not surprising to find that where the façades are structurally sound they serve the modern plan of a block of flats as well as any modern built front. In most towns one would not worry about the preservation of the façade of a block of tenements, but here there is a difficulty which does not usually arise. Slums are no commercial asset to London or any Midland town, and their historic and sentimental value is generally negligible; but in Edinburgh the position is different, for not only is it unnecessary from the practical point of view, as we shall see, to demolish the outer walls of a block of "apartment houses" where the structure is sound, but it is actually undesirable to change radically the architectural appearance



Figure five. No. 45 Grassmarket before rebuilding. In the rear obstructions were removed to provide a playground and drying ground.



Figure six. No. 45 Grassmarket after rebuilding. Instead of the two side doorways one entrance only is provided at the back of the building.

of the streets; for these tall buildings, with their height, their abundant fenestration and picturesque roof-line, form the background to Edinburgh as a place of pilgrimage. The Edinburgh Corporation is therefore concerned in cleaning up the Old Town by buying up condemned properties, replanning them, and thinning out the appalling density of the population, while at the same time preserving as far as possible the architectural appearance of the streets as we have grown to know them.

Fortunately, this desire of theirs does not lead the City Architect, Mr. E. J. MacRae, into the trap that has so evidently captured such English towns as Chester, and he has not had to catch a million mediæval minnows in order to make a passably deceptive mediæval whale. The stone-built streets which he has to doctor are so eminently practical in appearance, and so free from rigidly "period" decoration, that were he to attempt to evolve a new type of street front, given the same material, it is doubtful whether any solution more simple and straightforward than that of the seventeenth- and eighteenth-century builders could be arrived at. It would, therefore, be illogical for the modernist to cavil at the traditional flavour of the work produced by the City Architect's department; it is right, both æsthetically and practically, for its place and purpose.

Before giving details of the slum clearance work carried through by the Edinburgh Corporation, it is necessary to explain that we are here only dealing with a portion of their activities in this direction. The map (figure one) indicates the area under consideration; it includes the Grassmarket, Cowgate and Candlemaker Row, all of which are in the Old Town on the south side of the Lawn Market. The Grassmarket was the place appointed for the sale of horses, beasts and sheep, etc., within the city, and the wall with the West Port closed one end of it.

From the map it can be seen that the Grassmarket holds out much greater hope of improvement, without undue disturbance of existing sites, than most slum streets, the distance from one side to another being about 45 yards. Cowgate has the average width of Edinburgh streets of this type, i.e. 16 yards, while Candlemaker Row is comparatively narrow. The general appearance of all three is at first discouraging, but on closer acquaintance the dignity and almost modern simplicity of the buildings become apparent, and one realizes that squalor and social misuse here tend to mask architectural merits of some importance.

In this area were three types of buildings to be dealt with: those that were very inconveniently planned for adaptation or too far gone for salvation, and which have had to be pulled down and entirely rebuilt (17, 45, and 74-82 Grassmarket); those of which the outer walls were sound, but which needed interior replanning to make them habitable, according to a reasonably decent standard of living (35-43 Candlemaker Row, and Candlemakers' Hall: figure two); and those blocks the position of which, at the back of tenements facing the street, rendered them detrimental to the health of the neighbourhood (i.e. blocks behind 45 and 17 Grassmarket).

The plan (figure three) of a single floor of 35-43 Candlemaker Row tells a typical tale of misery. These premises were originally built as two large houses, but later, on each floor, there were as many as five one-apartment and three two-apartment houses, accommodating some thirty-five persons, with one w.c. and sink for the use of each group of apartment houses. Figure four shows the reconstructed edition of a typical floor in the same premises; the left-hand half, previously a group of five one-apartment houses, now consists only of two two-apartment houses with ample offices, while the right-hand half has been transformed from apartment houses into a women's hostel containing dining-room, kitchen, and staff sitting- and bedrooms, and three floors of dormitories with baths and w.c.'s, etc. To enable the division of these premises to be made, two separate staircases on either side have been substituted for the former central flight to the upper floors, and in several other ways, apparent on examination of the plan, much ingenuity has been shown in the replanning of this oddly shaped block.

No. 45 Grassmarket is an example of straightforward planning. The squalid appearance of this block prior to rebuilding can be seen in the photograph (figure five). In this case much building obstruction in the rear was removed, so that there might be an ample area to serve as a children's playground and a drying ground for the tenants' washing. The appearance of the new block (figure six), though marred by the slope of the roof and small size of the chimney stack—the result of enforced economy—is sturdy and the plan (figure seven) is excellent. The whole of this block is devoted to two-apartment houses, and instead of the two street entrances of the former building there is one main entrance from the newly-cleared close at the back, away from the public highway.

(*To be concluded*)

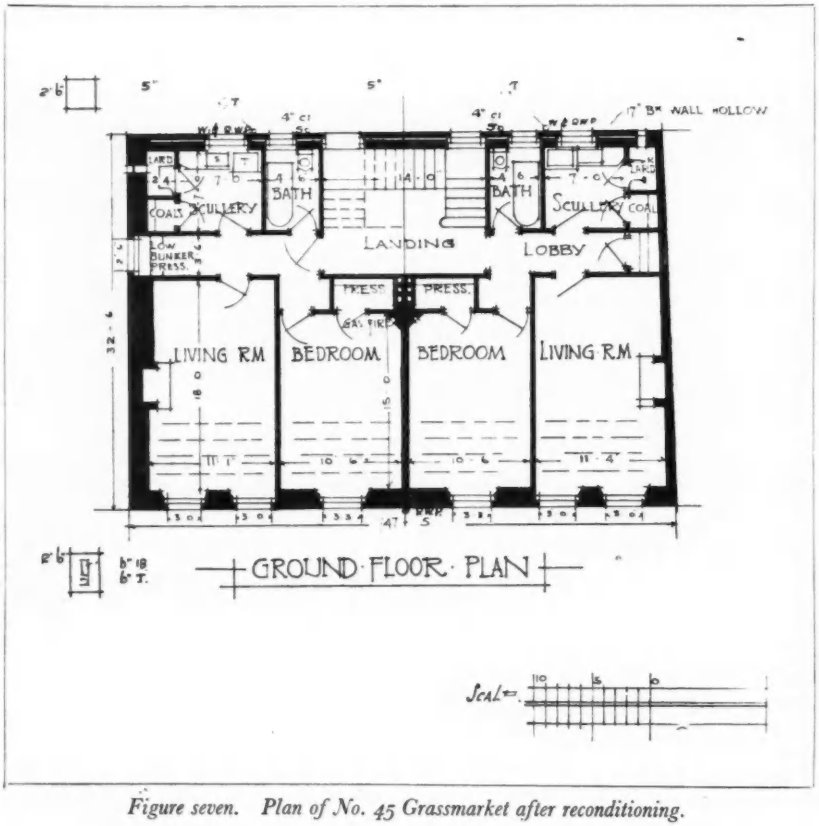


Figure seven. Plan of No. 45 Grassmarket after reconditioning.

JOHN NASH, SPECULATOR

A Century-old Parliamentary Debate on his Conduct



THE following abridged account of certain proceedings in the House of Commons when the professional conduct of John Nash, architect and surveyor to the Crown, and designer of Regent Street, was called in question, is taken from The Morning Chronicle *dated March 3, 1830.*

This is a sheet of four pages, each about the same depth as The Times *today, but about 2½ ins. less in width, bearing five columns of closely-printed type, and was published at the price of sevenpence.*

In the previous year a Committee had sat to investigate the matter, and now a member of the House and of that Committee sought to re-open it in relation to dealings in land in Pall Mall East and Suffolk Street, and adjoining the Regent's Park Canal, in connection with the improvements then in progress, alleged to have been improperly undertaken by Nash. Reference is made to the fact that his health was broken in consequence of attacks of the kind, and one Member is reported as saying that "If Mr. Nash had not been speculator as well as surveyor, Regent Street would never have been finished."

*The illustration is of a portion of a cartoon, published in 1824, showing the architect impaled on the spire of All Saints, Langham Place, and is entitled "*Nashional *Taste ! ! ! ", is dedicated, "without permission, to the Church Commissioners," and bears the following lines: "Providence sends meat; the Devil sends cooks; Parliament sends Funds; But, who sends the Architect ? ! ! ! "*

COLONEL DAVIES rose, in fulfilment of a pledge he had given last session, to bring forward an inquiry into the conduct of an individual against whom he said he was under the necessity of bringing a charge of the gravest nature, and which had already been the subject of inquiry before a Select Committee. He assured the House that he felt considerable pain in the discharge of this duty. The world was so apt to attribute motives of a private nature to an accuser, that their sympathies were generally excited against him, and in favour of the accused. If that was the ordinary case, his situation was tenfold more embarrassing, as he had, in some degree, to contend with the resolutions of a Committee, appointed at his own suggestion. He said he should not confine his charge to Mr. Nash only, for he had to bring a serious accusation against one of the principal Ministers of the Crown—the Chancellor of the Exchequer. In the Committee that Right Honourable Gentleman had exerted his talents and his influence to throw a cloak over the delinquencies of Mr. Nash; and, instead of discharging the duty of an impartial judge, he had assumed the character of a partisan. Colonel Davies asked the House to recollect that a Select Committee had been appointed to inquire into the conduct of Mr. Nash, architect and surveyor to the Crown. In 1819, when the improvements in Pall-mall east and Suffolk Street were in contemplation, Mr. Nash received directions from the Commissioners of Woods and Forests to survey and report upon the Crown Lands in that neighbourhood. After the report was made, a person of the name of Edwards, a near relation of Mr. Nash, applied for a large plot of the ground which had been cleared. He finally obtained a grant upon the valuation made by Mr. Nash, and according to his statement, employed him as his agent to sub-let the ground. Edwards then went abroad for about a year, and on his return, according to the evidence, an interesting scene took place between him and Mr. Nash, in consequence of which he surrendered his interest to Mr. Nash, who offered Edwards £4,500 for his bargain, and for that sum he became the purchaser. During Edwards's absence Mr. Nash had let the plot of ground at improved rents, although he had not laid out a single shilling in improvements to the property. Having thus become the purchaser for £4,500, Mr. Nash received no less than £14,600 in improved ground rents. Thus, Mr. Nash himself became the lessee of the Crown, although that fact was not known until three years afterwards; and in the meantime the Office of Woods and Forests supposed he was acting on behalf of the Crown. In order to make out a case, Mr. Nash had brought forward a highly respectable and eminent surveyor and architect, of the name of Shaw, who had also valued the land, and had arrived at nearly the same conclusion as Mr. Nash; but then he omitted a very material circumstance, that this ground, the rental of which to Mr. Edwards was £900, was to be held for the first three years at a peppercorn rent, making, as he himself acknowledged, a difference of no less than £2,700. Mr. Shaw had said as a reason for putting a lower value upon the property, that it was a hazardous speculation—but Colonel Davies denied that this was so. As soon as the Noble Lord at the head of the Woods and Forests had become acquainted with some of the leading facts of the case, he wrote to the Chancellor of the Exchequer, objecting to the course that had been pursued, especially to the circumstance that Mr. Nash had become the purchaser from Edwards; and stating in addition, that the frontage which had been stated by Mr. Nash to be only eighty-two feet, was, in fact, between ninety-seven

and ninety-eight feet. This discovery was made by the Noble Lord himself, who, on coming one day from the University Club, stepped the distance, and found that it had been greatly understated; from 1820 to 1829, however, this important variance had escaped notice. It could not be alleged by Mr. Nash that he was ignorant of the true measurement, because the extent of frontage to each house was stated in the margin of each lease he had granted, as the purchaser of the interest from Edwards. He referred the House to the evidence of Mr. Shaw, in which he strongly censored the situation in which Mr. Nash had placed himself; and said that as a broad principle, no agent ought to be allowed to become a party. Mr. Nash, employed by the Crown, had first become the agent of Edwards, then the purchaser of the grant to Edwards, and kept the Crown in complete ignorance of the whole transaction.

Having gone through the case as far as concerned Suffolk Street, Colonel Davies then proceeded to refer to the circumstances connected with the grant of Crown Lands in Regent's Park. He said that the facts of the case connected with the Regent's Canal were as follows :

In 1816 the Committee of that undertaking made application to the Office of Woods and Forests to obtain a lease of four acres of Crown Lands abutting on the Regent's Canal, in consideration of various expenses in making a collateral cut, basin, etc. Mr. Nash was at that time a very active member of the Committee of the Regent's Canal, and, being called upon to do so, he made his report to the Commissioners of Woods and Forests. After consideration, the Commissioners expressed their opinion that it would be more advantageous to have the canal company for tenants instead of an individual, and accordingly it was determined that the request of the company should be conceded. It was suggested, however, that no valid lease could be made with the company; and in order to avoid this legal difficulty the Committee of the Regent's Canal Company consented that the lease should be made out in the name of Mr. Nash. The Commissioners of Woods and Forests believed that the reason for this change was merely to overcome the legal difficulty, and that Mr. Nash was only to stand forward as the trustee of the company. The understanding, however, between Nash and the company was, that he was to be its nominee; some of the members of the company, when examined before the committee, stated that they thought Mr. Nash had stepped forward to relieve the company, and not for his own pecuniary advantage. Nevertheless, six years afterwards, the Committee of the Canal Company applied for a grant of four more acres of Crown land, and the application was signed by Edwards and Lyon, as solicitors of the company. Strange as it might appear, the Company were in no respect privy to this request—they knew nothing of it; for it happened that Edwards and Lyon, besides being solicitors to the company, were also solicitors to Mr. Nash, and they had applied for a further grant of Crown land in the name of the Company, when, in fact, it was for the sole private benefit of Mr. Nash. Mr. Nash was required by the Commissioners of Woods and Forests to report upon these circumstances, and instead of saying, "I cannot properly report upon a matter in which I am personally interested," he did execute his task; and with the result that he recommended that the subsisting leases, to which he was a party for fifty years, should be extended to sixty-one years. All this time the Department of Woods and Forests supposed that the leases had been granted to the Regent's Canal Company; and five years afterwards they were in ignorance of the real nature of the transaction. Before the Committee the solicitor for Mr. Nash admitted that fifteen out of seventeen wharves had been let for terms not exceeding fifty-four years, and upon these wharves Mr. Nash had not spent a shilling. For the first seventeen years of the term it was stipulated that Mr. Nash should pay for the wharves a rent of £54 14s., while he received from his tenants £1,698. For the next seven years he was to pay £63, and for the following fourteen years his rent to the Crown was to be £634, and he would consequently gain £1,064 during this last period. This advantage had been obtained, contended Colonel Davies, on false pretences, Mr. Nash having taken advantage of the situation he filled and of the influence he enjoyed. Colonel Davies went on to refer to the fact that Mr. Nash, as architect to the Crown, was responsible for the quality of the building materials used, and that he had sold bricks at 16s. a thousand as being bricks of the best quality; and those intended for Cursitor Street he used in Regent Street, though they were an inferior quality.

Further, Mr. Nash was paid for reporting upon his own work; it was also in evidence that he first got four acres of ground, and then eight, and disposed of that land at a profit of £1,643, and that was effected under false pretences. Colonel Davies asked the House what they would think if the Chancellor of the Exchequer jobbed in the public funds as Mr. Nash had jobbed in the public land, and yet the whole conduct of the Chancellor of the Exchequer was that of a partisan. If a new committee were appointed, Colonel Davies promised that he could throw much new light upon the matter which had been referred to the former committee, evidence which he had no doubt would lead to Mr. Nash's removal from his present situation. He concluded by moving that a Select Committee be appointed to inquire into the conduct of Mr. Nash with respect to the Crown Lands in the County of Middlesex.

The Chancellor of the Exchequer then spoke, and said that last year the Honourable and Gallant Officer had made assertions which were not borne out by the evidence laid before the Committee; and by the results attendant upon these assertions they could judge how far his accusations of this year were to be regarded, accusations which were ten times as great and important as those preferred last year. As to the charges made against himself, of partisanship and improper support of Mr. Nash, he was sure the House would do him the justice to believe that his sole object was to do his duty to the public on the one hand, and to the individual accused on the other. He had carefully attended to the evidence on both sides, and having arrived at a different conclusion from the Hon. Member, he certainly felt bound to propose to the Committee a resolution expressive of the view which he took of the subject generally, and of the conduct of Mr. Nash; and he would defend that resolution without being deterred by any threat or by any imputation that might be attempted to be thrown upon his honour or character. He could satisfy the House as he had satisfied the Committee, that the views he took of the conduct of Mr. Nash were perfectly correct. The House had entertained charges against Mr. Nash, had appointed a Committee to inquire into those charges : would they then, at the instance of a minority of that Committee, re-try the same individual on the same charges? Here was a gentleman tried and acquitted before a committee; and if a new committee were to be appointed to do the work of the former committee over again, in that way Mr. Nash might be hunted session after session until the most unjust decisions were at length arrived at; more especially when the state of the health of the individual in question made it extremely doubtful whether or not it would be in his power to attend the sittings of the committee. Finally, he had only to add that if any honourable member, besides the mover, thought him capable of all that had been charged against him, he hoped that such a sentiment might be openly stated, for then, though not till then, he should feel it



This contemporary print of Lower Regent Street, looking towards Waterloo Place, is of particular interest as showing, on the left, Nash's own house (with three semicircular-headed windows). The old Carlton House is seen, in the distance, at the other side of Pall Mall.

necessary to enter at length into the evidence and proceedings of the Committee for the purpose of removing any such impression. This much only should he say, that he never had the slightest knowledge of Mr. Nash till he entered upon his present situation. With these few observations he should content himself, unless further accusation should lead him to go through the ninety-seven documents laid before the Committee. (Hear, hear !)

Mr. Warburton, in the course of the debate, called the attention of the House to the resolution agreed to by the Committee, in which they stated " that although there was no evidence that any loss had accrued from the conduct of Mr. Nash, yet it was the opinion of the Committee that the Commissioners of Woods and Forests ought not to grant leases to surveyors or architects having any immediate interets, or being liable to be called in to give their opinions—until their duty, as surveyors or architects, had ceased." Thus, by implication, they did convey that Mr. Nash had an immediate interest in the lands which had been made the subject of observation.

Mr. Ward said he was a member of the Regent's Canal Committee, and there the conduct of Mr. Nash had been made the subject of discussion. The facts there brought to light were certainly such as enabled him to bear favourable testimony to the conduct of Mr. Nash.

Mr. Maberley supported the motion. In his opinion, however, the attack that had been made upon the Chancellor of the Exchequer was not warranted. (Hear, hear !) From the resolutions passed by the Committee, it was a fair inference that they were dissatisfied with the transaction, and though the Committee had not actually pronounced that fraud existed on the part of Mr. Nash, it was pretty evident that that gentleman had not properly discharged his duty, and that any one acting as he had done would be held culpable in the public estimation.

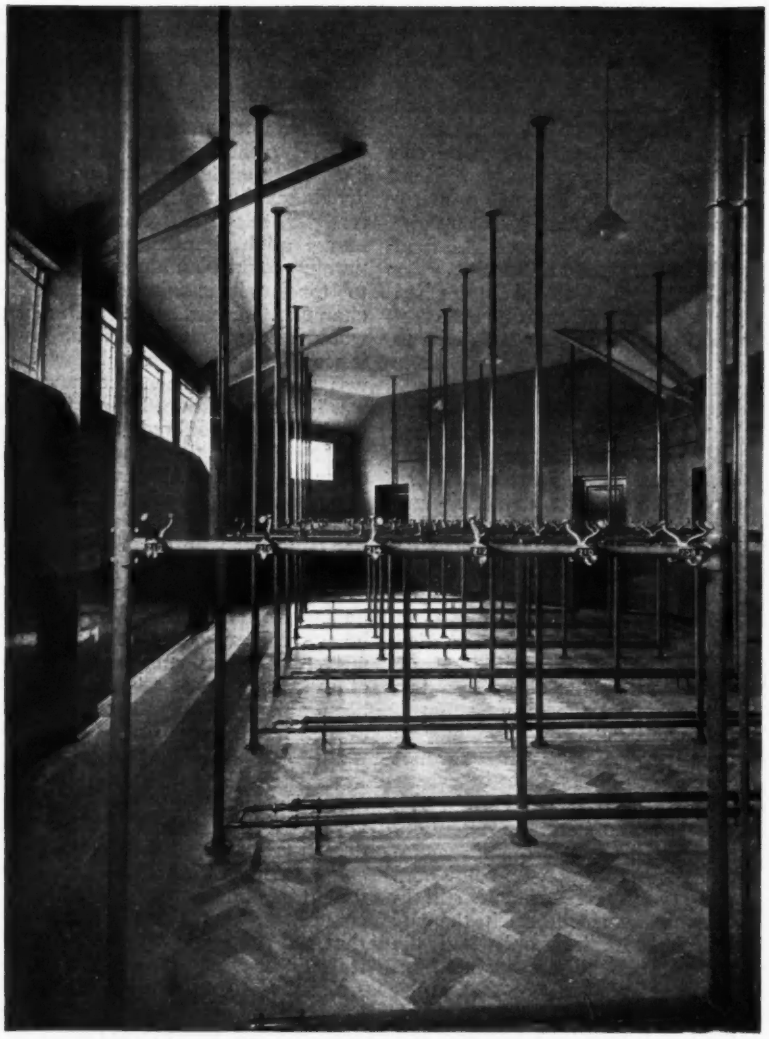
Mr. Calcraft said Colonel Davies had not given a fair statement of the case, as he had quoted the answers given to his own questions only, and not one tittle of any other part of the evidence which was before the Committee. It had been proved in evidence that there was no connivance whatever between Mr. Nash and Mr. Edwards; on the contrary, when the ground in Pall-mall east was leased to Mr. Edwards, that gentleman was abroad, and when he returned, he found that the ground was much more than he wanted, and he was therefore very anxious to get rid of it. The Committee had decided that Mr. Nash ought not to have appeared in a double character; but this he could tell the House—that if Mr. Nash had not been speculator as well as surveyor, Regent Street would never have been finished. Mr. Nash, at great risk and hazard, had carried that noble project into complete execution. In respect of his attack on the Chancellor of the Exchequer, he considered Colonel Davies less fortunate still in his accusations, for whereas in the case of Mr. Nash he had only had the committee and witnesses against him, in his foul aspersion on the Chancellor of the Exchequer he had the whole House against him. (Hear, hear !)

Sir M. W. Ridley said that, though he opposed the Committee, he was authorized by Mr. Nash (who was now suffering under illness severely aggravated by the repeated attacks upon him) to state that he had no desire to avoid any inquiry; and that he was ready to adopt any course which the House might impose, as he felt that nothing could be adduced against him to touch either his honour or his character. (Hear, hear !) One fact he would state about Mr. Nash, because it would show the spirit by which he was actuated. When the new street was first in agitation, Foley House and gardens were offered for sale, and Mr. Nash gave £4,000 more than any other bidder, and afterwards cut it up into shreds and patches for the purpose of suiting the objects of the new street line, by which he greatly depreciated the value of his property. (Hear, hear !)

Colonel Davies, in reply, said he had no wish to re-try Mr. Nash, but he wanted an examination into fresh matter, which, owing to the lateness of the inquiry last year, he had not been able to bring forward. At all events he trusted that Government would cause the houses in Regent's Park and Regent Street, and, still more, Buckingham Palace, to be surveyed; for he thought that a great deal of foul play would in consequence come to light. As the Minister had said that he would not allow the committee, he (Colonel Davies) knew that the matter was settled, and that it would be of no use to press a division. At all events, he had the satisfaction of knowing he had discharged his duty to the House and the country.



A general view of the school, showing the Imperial Road front (right). The building will accommodate 780 children, and is faced with Binfield bricks, with dressings of pre-cast stone. The roof is covered with hand-made sand-faced tiles, and the plinth is finished in white cement rendering. Built into the walls beneath the semicircular-headed windows are two stones. That on the



Every care has been taken by the architects to safeguard the health of the scholars. In the cloakrooms, of which there are four, each hat and coat hanger is numbered, and beneath each rack at floor level are hot-water pipes to dry the children's clothes during wet weather.

BOYS' AND GIRLS'

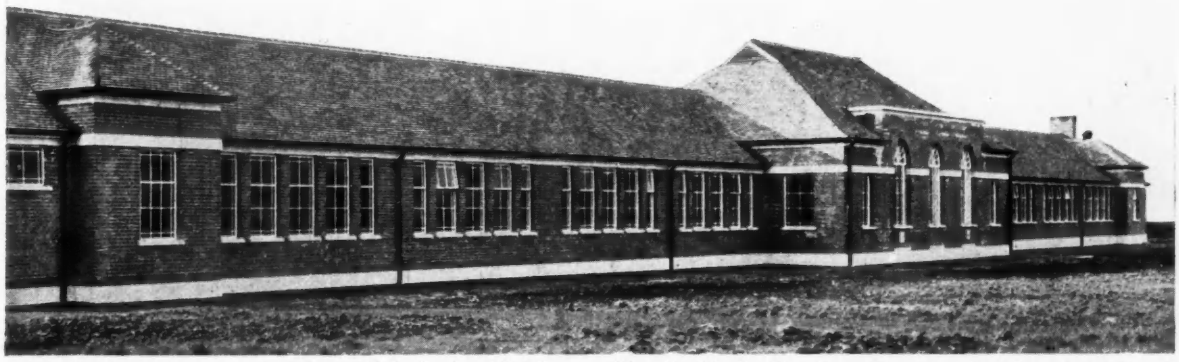
Designed to form a

BY LEATHART

TODAY, March 26, the President of the Board of Education will open the new elementary school which has been erected for the Borough of New Windsor Education Committee at the corner of Clarence Road and Imperial Road. The school accommodates 780 children, in three departments: senior boys, senior girls and junior mixed. There are two assembly halls, one for the senior school and one for the junior school and, of course, the various classrooms. In addition, there are administration rooms, staff rooms for the heads of the departments and the teaching staff, together with independent lavatories and headmistress's room and headmaster's room.

The site is eleven acres in extent, and provides a large common playing-field at the rear of the school. The aspect of the classrooms runs slightly west of south and slightly south of east, with the corridors on the north and west sides of the respective blocks. Four entrances are provided to the school, i.e. for junior and senior girls, and junior and senior boys.

Externally the building is treated in a simple Georgian manner with the two assembly halls emphasized as central features. The elevations are faced with Binfield bricks in English bond, pointed with a flush white cement joint, toned down with yellow sand to approximate to a lime mortar pointing.



left is the foundation stone, laid by Lt.-Col. Stephen Wright, C.B.E., Mayor of Windsor, on June 26, 1929. That on the right records that the school was opened by the Right Hon. Sir Charles Trevelyan, Bt., M.P., President of the Board of Education, on March 26, 1930. This stone is also inscribed with the names of the architects and builders.

SCHOOL, WINDSOR

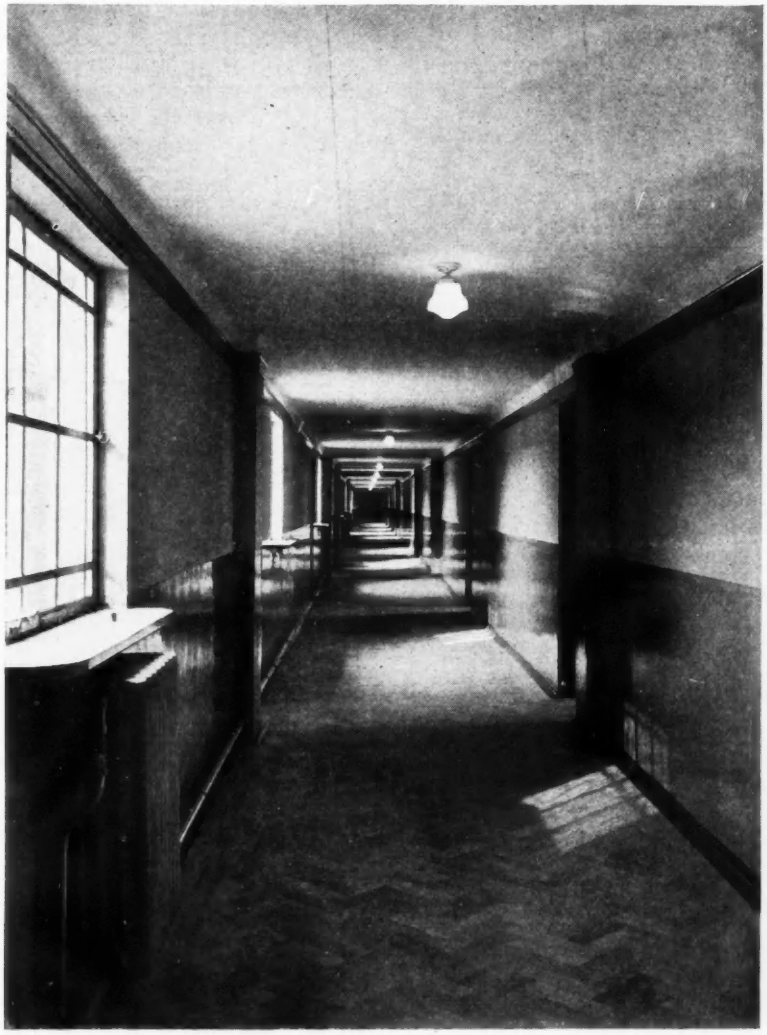
Double Quadrangle

AND GRANGER

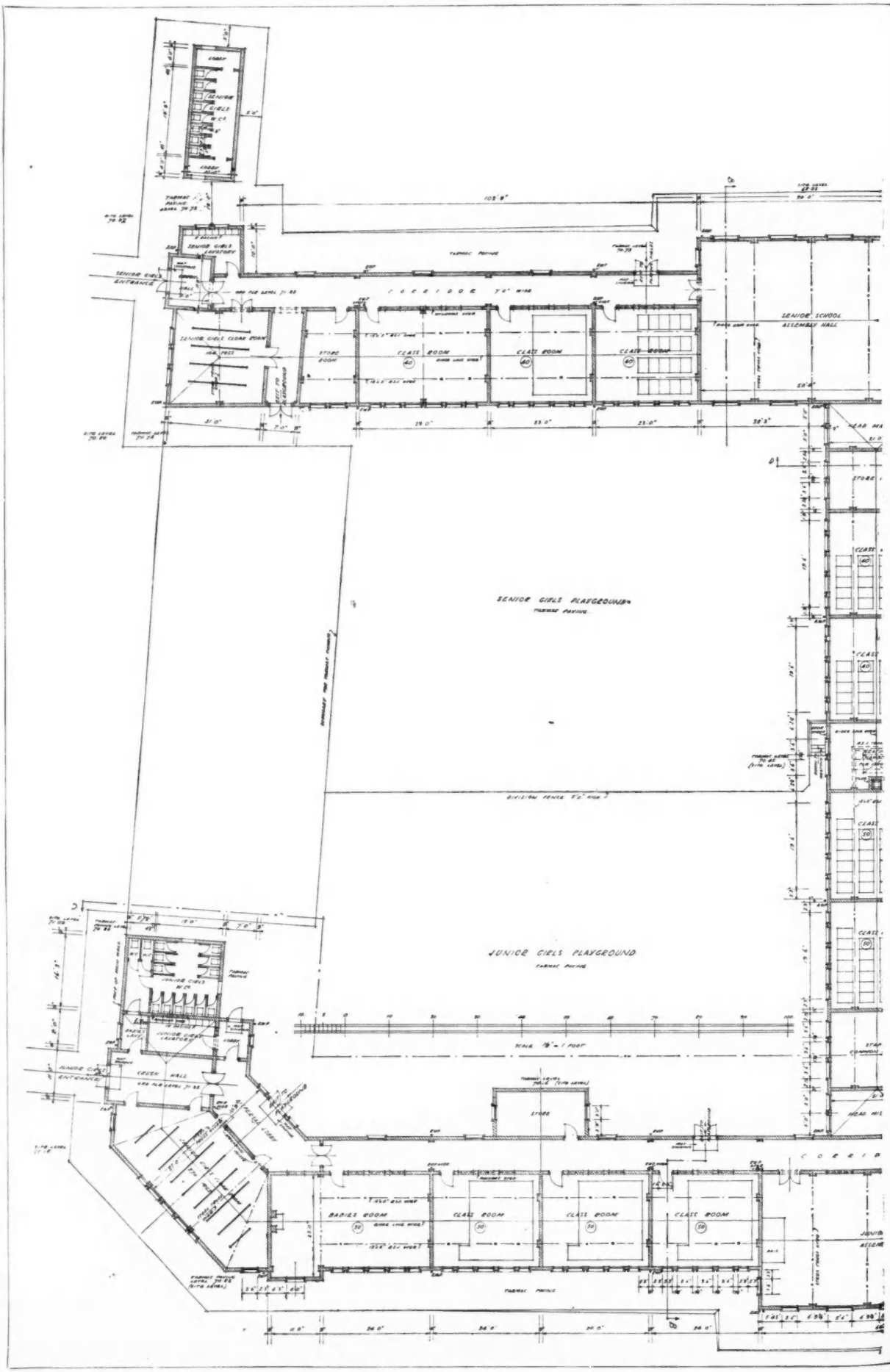
The roofs are built to a pitch of 40°, and are covered with hand-made sand-faced tiles of a rich cherry red. Eaves are in pre-cast stone, and the plinth is finished in white cement rendering. In the classrooms the casements are of the austral type, the metal windows being painted white externally and yellow internally.

All the classrooms, halls, etc., are plastered and finished with buttercup yellow walls with a grey-blue painted dado; and the floors are of Austrian oak blocks. The internal angles of the rooms, the junctions between the walls and ceilings and the junctions between the walls and the floors are coned to a 3-in. radius. For ventilation purposes the classrooms are designed to a greater height than the corridors, the roofs of which have been kept as low as possible. Heating is by a low-pressure hot-water system by means of radiators and exposed flow-pipes in the corridors and classrooms. The doors throughout are single panel Columbian pine. All woodwork inside is royal blue, the doors dark blue and the architraves light blue. Tarmac is used for the playgrounds and approaches.

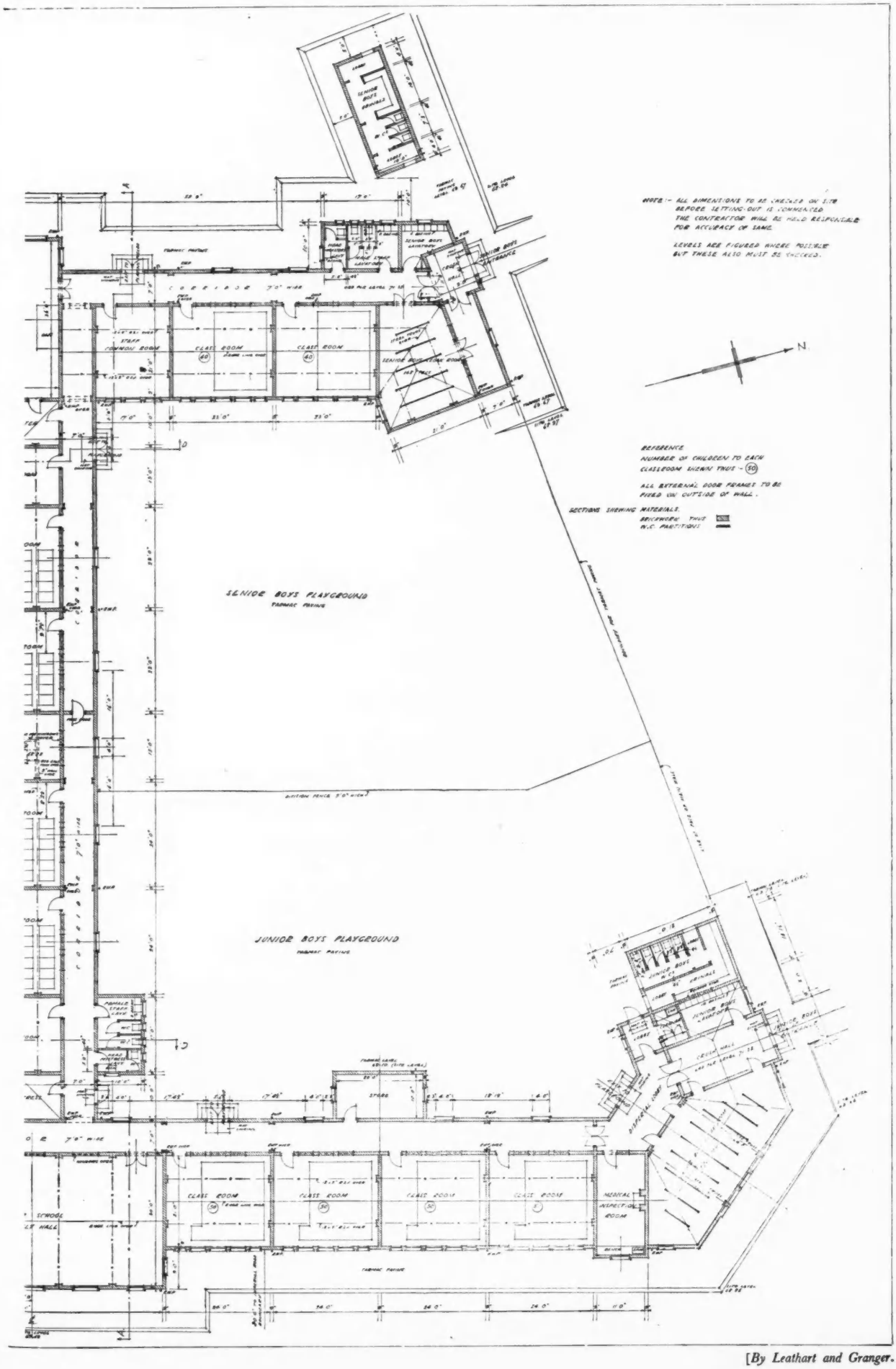
The school is so planned that it is capable of extension by future class-rooms for each department. When this extension is completed the building will have a double quadrangular plan with the playgrounds in the quadrangles.



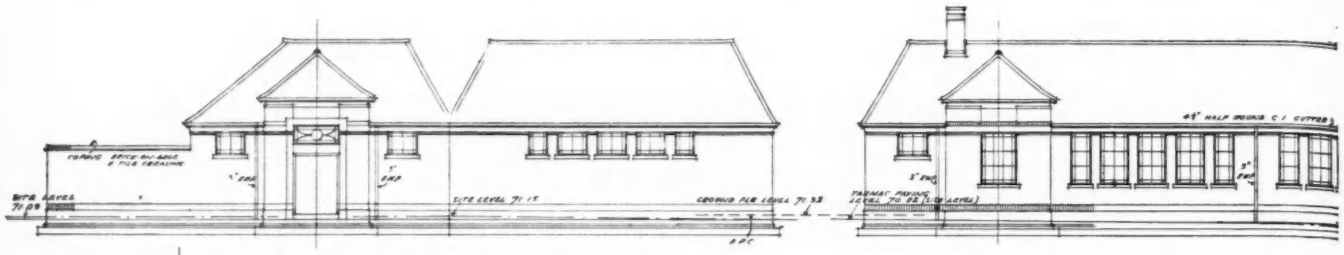
The corridor in the junior girls' department is similar in design to those of all the departments. It is 7 ft. wide. One side, the left, overlooks the playground, from which it receives good natural lighting, and on the other are planned the assembly hall and the classrooms.



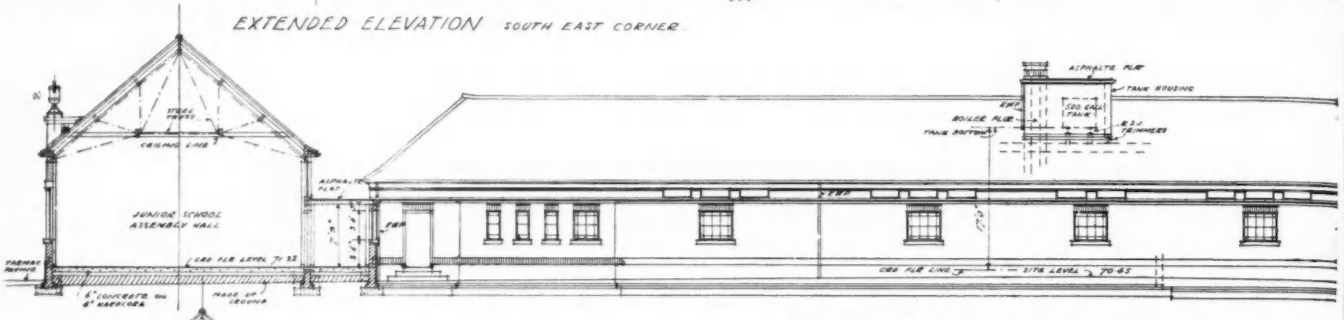
Elementary School, New Windsor.



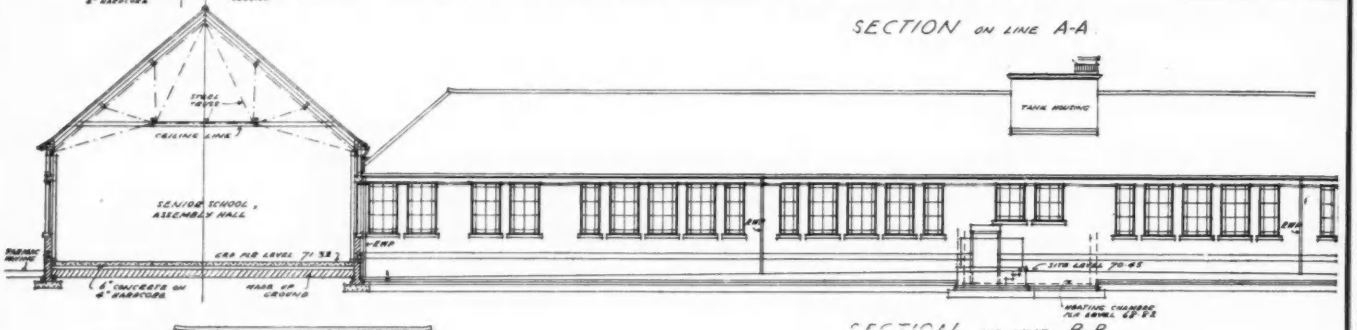
[By Leathart and Granger.



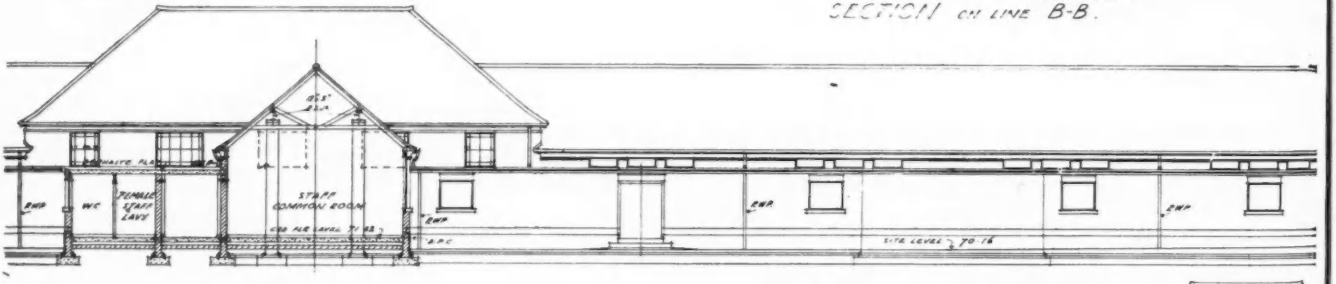
EXTENDED ELEVATION SOUTH EAST CORNER.



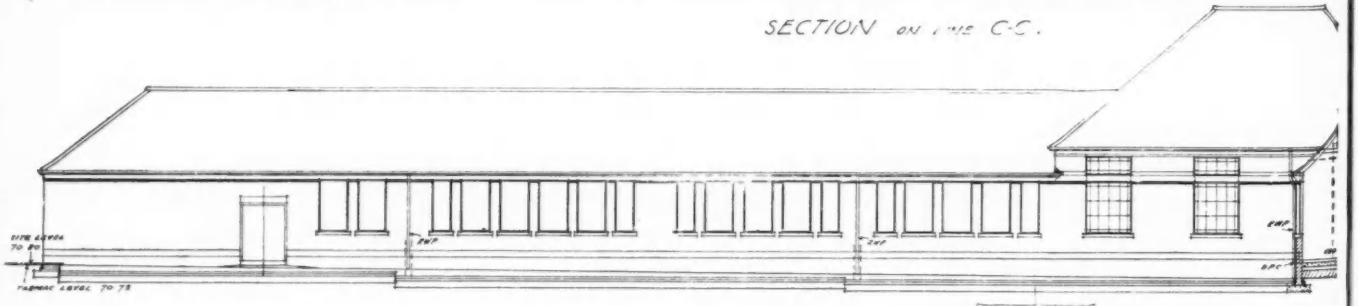
SECTION ON LINE A-A.



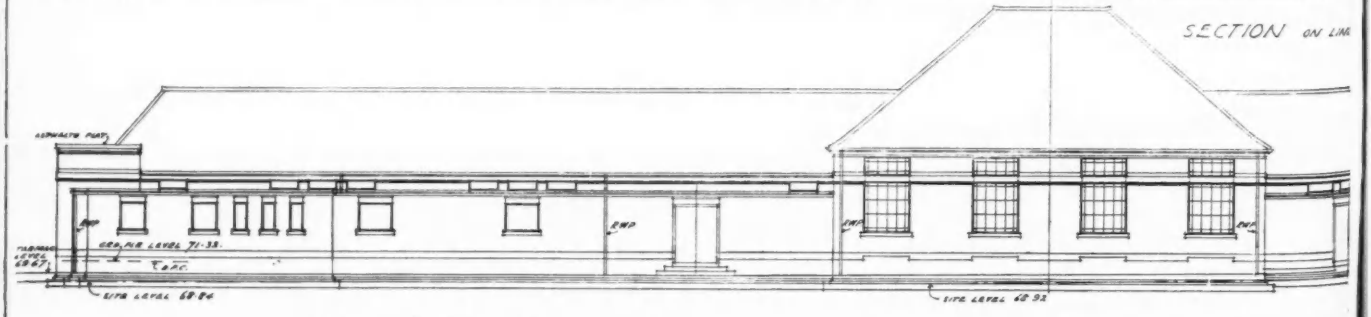
SECTION ON LINE B-B.



SECTION ON LINE C-C.



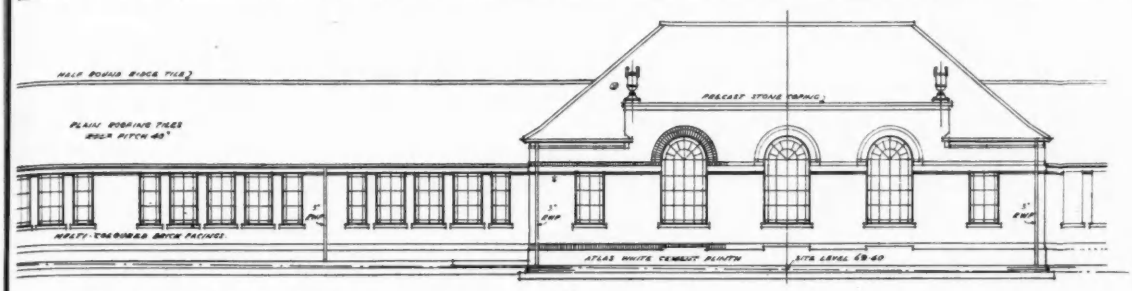
SECTION ON LINE D-D.



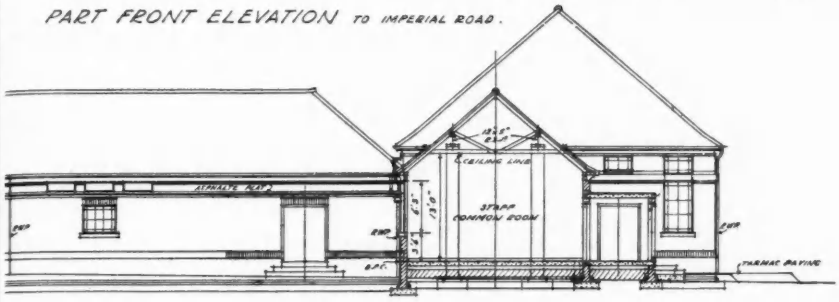
WEST ELEVATION SENIORS' WING



Elementary School, New Windsor.]



PART FRONT ELEVATION TO IMPERIAL ROAD.



NOTE:- ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE SETTING-OUT IS COMMENCED. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ACCURACY OF SAME.

LEVELS ARE FIGURED WHERE POSSIBLE BUT THESE ALSO MUST BE CHECKED.

SECTIONS SHEWING MATERIALS:-

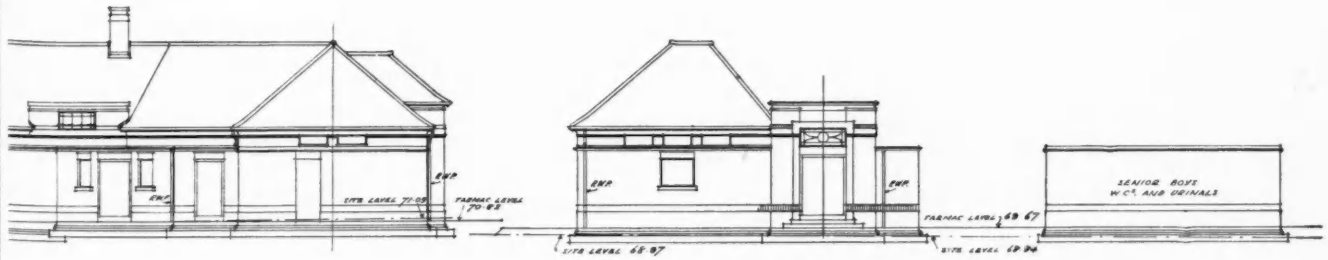
BRICKWORK	THUS	
PRE-CAST STONE	"	
CONCRETE	"	
MADE UP GROUND	"	



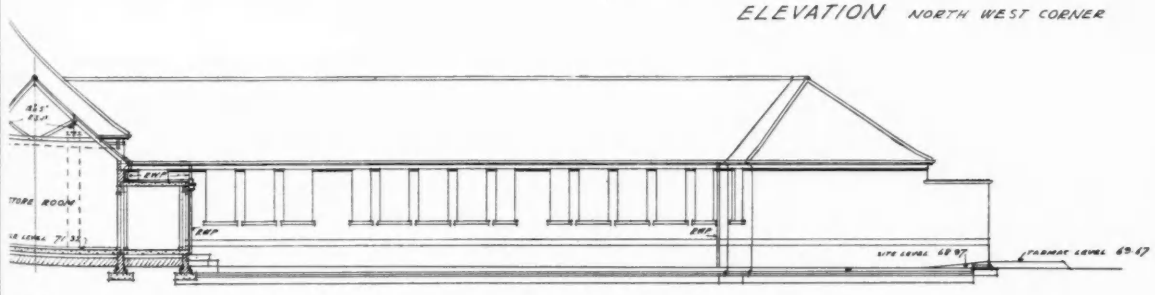
OMISSIONS:-

COURSE OF 1" BRICKS UNDER COVED CORBEL COURSE ALL ROUND 8.

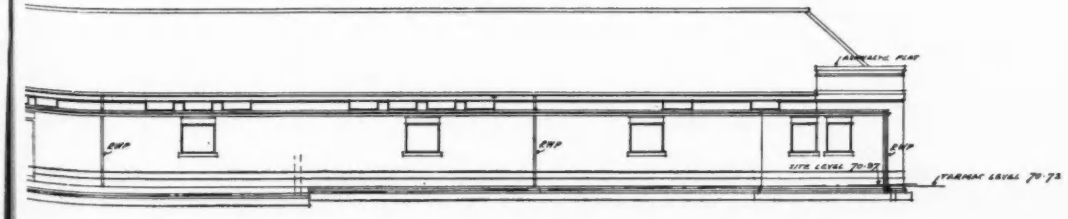
No 3 CAST STONE URNS ON PARAPET TO FRONT ASSEMBLY HALL 8.

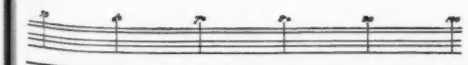


ELEVATION NORTH WEST CORNER

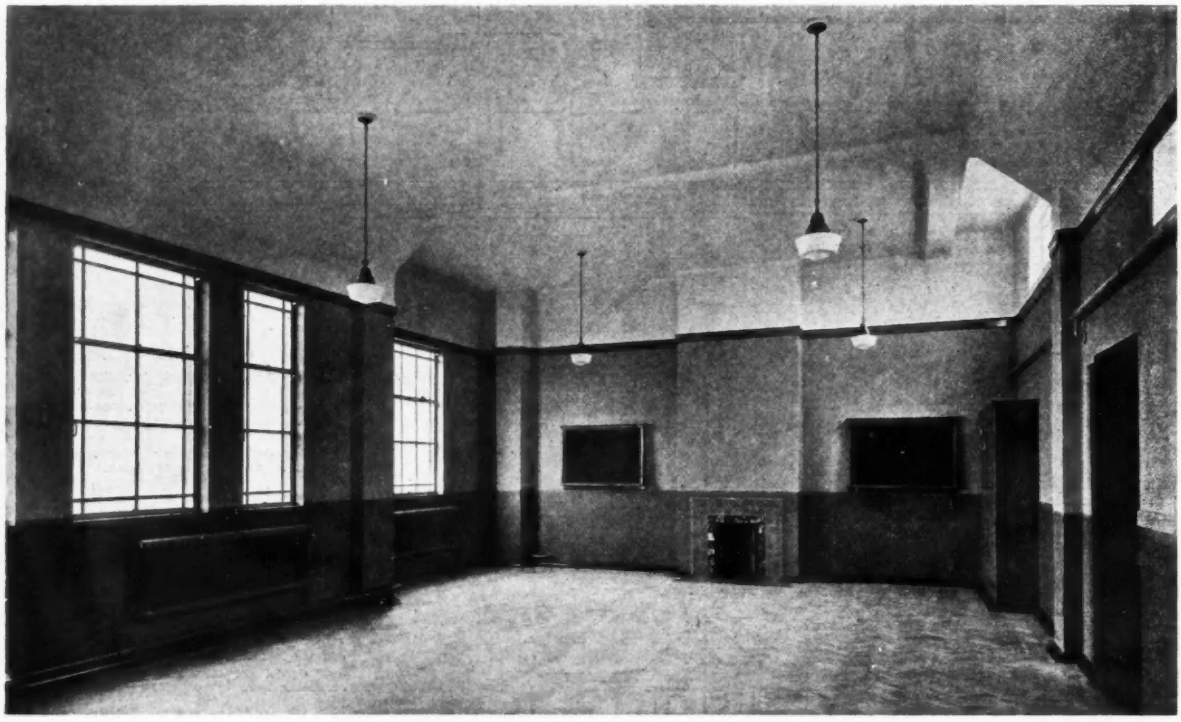


D-D.

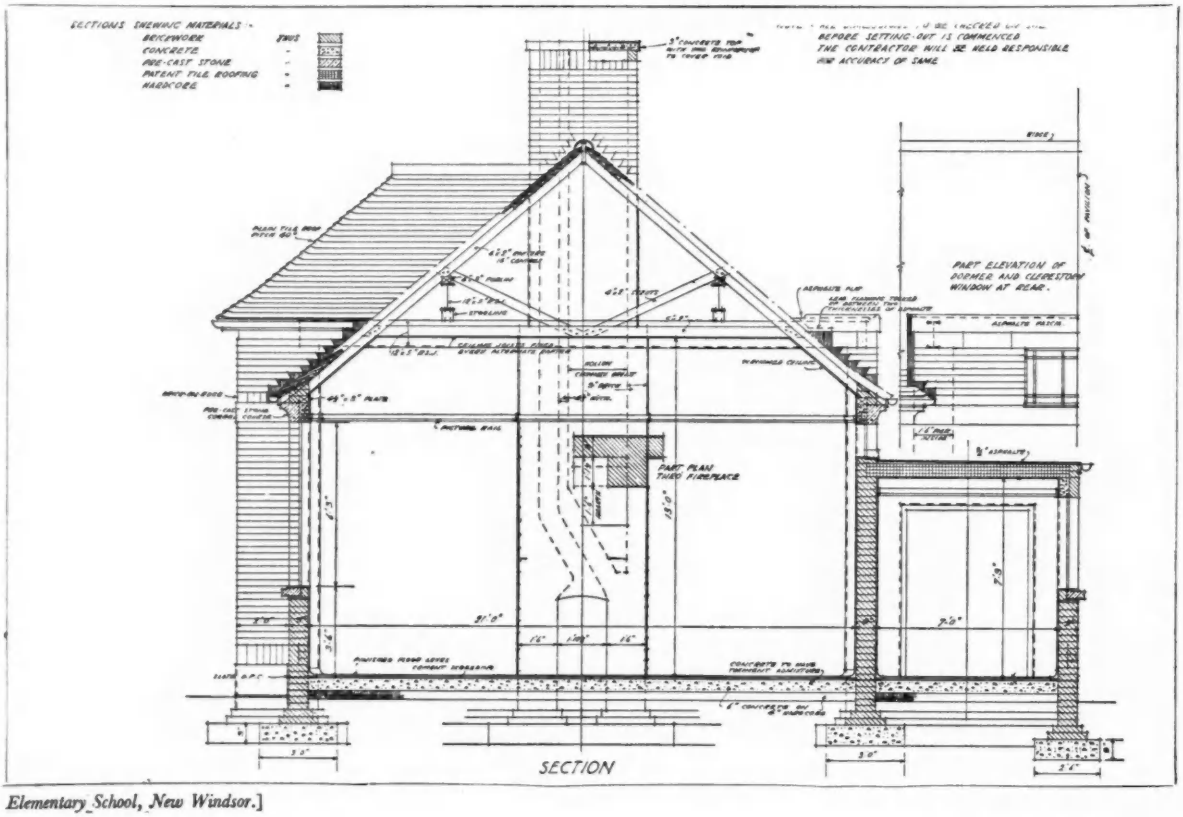




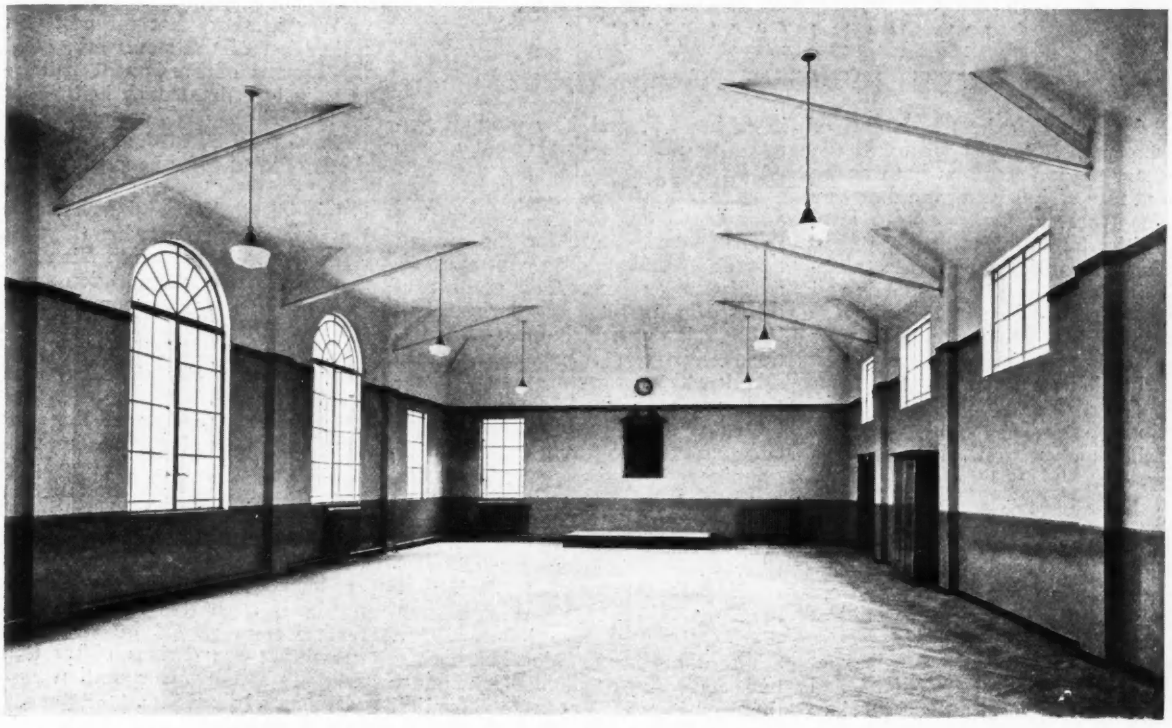
[By Leathart and Granger.



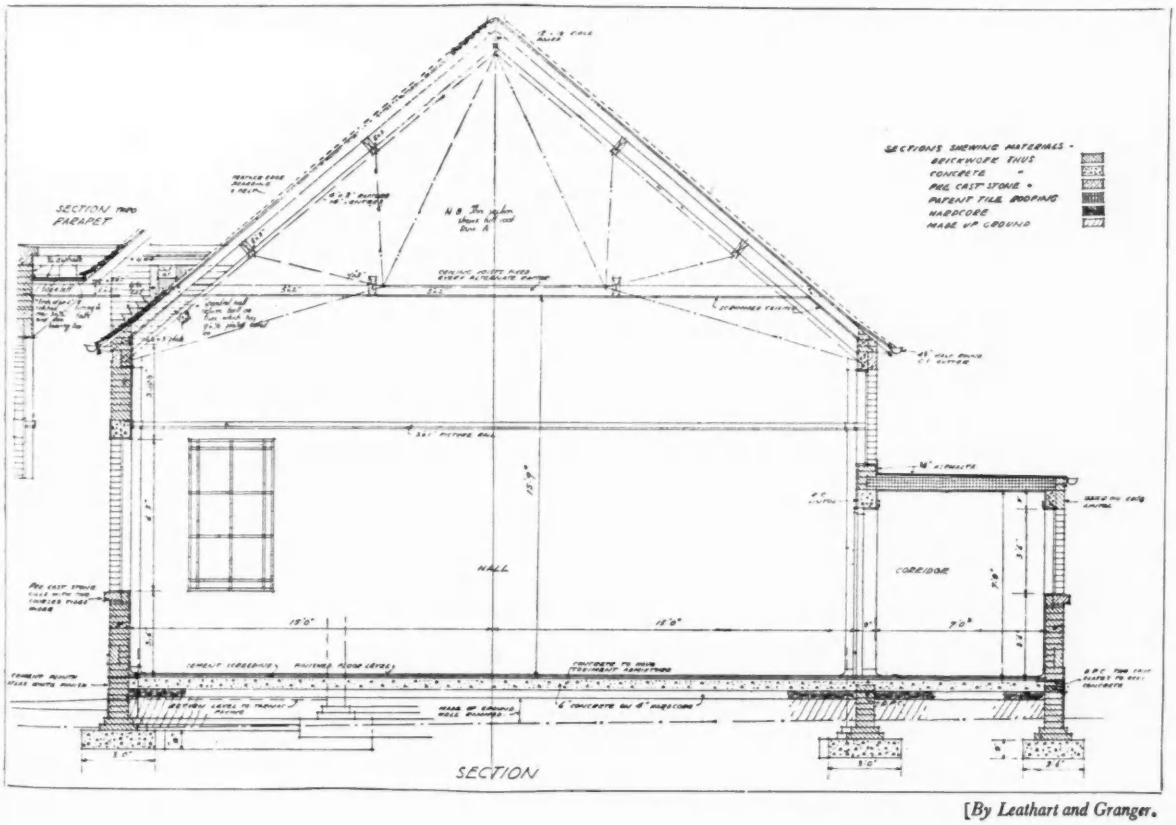
This view of the babies' room is taken looking in the same direction as that shown in the architects' sectional drawing reproduced below. Every part of the interior of the school has plastered walls finished in buttercup yellow, with a grey-blue painted dado. All internal woodwork is royal blue, the doors dark blue and the architraves light blue. Floors are Austrian oak blocks.



Elementary School, New Windsor.]



There are two assembly halls, one for the junior school, a photograph and section of which are shown, and one for the senior. Each is decorated in the same manner and has floors of the same material as the remainder of the school (see facing page). The hall shown, with its three semicircular-headed windows, forms the central architectural feature of the Imperial Road front.



[*By Leathart and Granger.*

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

AT question time in the House of Commons, Mr. Simon asked the Secretary to the Treasury what was the present rate of interest charged by the Public Works Loan Board to local authorities for loans for the purposes of housing construction; when the last alteration in the rate came into effect; and whether any decrease in the said rate of interest could now be made in view of the recent reductions in bank rates.

Mr. Pethick Lawrence said that loans to local authorities for the purpose of housing construction were made at the minimum rate in force for the time being. Since October 15 last that had been 5¼ per cent. per annum, but in view of the present monetary conditions it had been decided to reduce the minimum rate for local loans from 5¼ per cent. to 5 per cent. as from March 21. The other rates would at the same time be lowered by ¼ per cent.

Dr. Hastings asked the Minister of Health whether any convictions had been secured by local authorities since 1926 for the emission of smoke other than black smoke from buildings.

Mr. Greenwood said he had no information of convictions for the emission of other than black smoke, and he did not think that the expense of a general inquiry in order to obtain comprehensive information would be justified. Local authorities generally proceeded by representations and usually prosecuted only as a last resort.

Dr. Hastings asked if the Minister would be prepared to approve by-laws under section 2, sub-sections (1) and (2), of the Smoke Abatement Act, 1926, defining noxious smoke as smoke of some specified density as measured by the Ringlemann test, which had been used for many years in the United States of America.

Mr. Greenwood said he was aware that in some places in the United States this test had been used, but no local authority in this country had proposed to embody it in by-laws under the Act of 1926 and, as at present advised, he did not think it was suitable for that purpose.

Major Nathan asked the Minister of Health whether he was yet in a position to state when he proposed to introduce the projected Bill dealing with slum clearance.

Mr. Greenwood said he hoped to introduce the Bill at a very early date.

Asked by Mr. Sawyer what was the annual expenditure incurred by his department in connection with town-planning schemes and their preparation, the number of his staff engaged in such work, and how many town-planning schemes had actually been adopted and were in operation, Mr. Greenwood said the number of staff at present employed was twenty-nine, and the expenditure for the current financial year would amount approximately to £13,500. The number of town-planning schemes approved and in operation was thirty-four. In addition, thirty-two schemes had been submitted and were under consideration, 150 preliminary statements had been approved, and another 141 had been submitted and were being examined, and in 492 other cases resolutions to prepare schemes had been passed and proposals were in various stages of consideration. Further, appeals on a number of town-planning matters had to be decided by him.

Mr. Greenwood also informed Mr. Sawyer that since 1918 local authorities had acquired 73,033 acres of land under the Housing Acts, at a total capital cost of approximately £15,200,000.

Mr. Lansbury, the First Commissioner of Works, stated that the cost of the restoration of the stonework, etc., of the Houses of Parliament had been tentatively estimated as being in the neighbourhood of £1,000,000.

Mr. Mathers asked the First Commissioner of Works if the model and plans of the building to be erected upon the Calton jail site in Edinburgh had now been completed; if so, when they would be made available for inspection by the Scottish Fine Art Commission and the Edinburgh City Corporation; and whether the model would be made available for examination by Members of the House after these two bodies had inspected it.

Mr. Lansbury said that the answer to the first part of the question was in the affirmative, and the model and plans of the proposed buildings were now before the Royal Fine Art Commission for Scotland for their consideration and advice. Until he had received and considered their report, he would not be in a position to consider what further steps should be taken as to submitting the designs either to the Edinburgh City Corporation or to Members of the House.

THE LONDON BUILDING ACTS

From a Correspondent

SINCE the year 1667, when the "Act for rebuilding the City of London" was passed, after the Great Fire, its citizens have constantly been guided and controlled in their building activities by amendments and extensions of the law affecting buildings and their surroundings. The growth of the metropolis, the introduction of new materials, and changes in the mode of life of the population have called for periodical revisions of the enactments for the protection of the public.

From footings and foundations to chimney-caps and sky-signs, from private streets and noxious businesses to buildings of mixed construction, the details of buildings and their appendages have been regulated. Twelve Acts have passed into law since the London Building Act of 1894, containing further provisions controlling building.

The Bill now before Parliament was deposited in 1928. It is framed to consolidate into one Act the enactments relating to streets and buildings in the County of London.

Upon a perusal of the draft Bill it will be noticed that section 54 of Part VI contains the general regulations for steel-framed buildings. Section 55 authorizes the County Council to make regulations for reinforced concrete buildings, whilst section 230 provides for the continuance of the present regulations. The portion of the 1908 Act dealing with cubical extent and the uniting of buildings appears as sections 76 to 79. Means of escape in case of fire is covered by Part VIII, and the rights of building and adjoining owners by Part IX.

The six schedules set out the materials classed as "fire-resisting," rules for wall thicknesses, details of steel-framed buildings, fees payable to the council and district surveyors, and a list of enactments repealed.

Those in contact with the administration of the Acts in London will observe with some regret that the familiar numbers designating the sections of the Act will be altered in most cases. Sections 22, 73, 83, 201 and 207, for instance, now become 21, 74, 85, 216 and 223 respectively. The meaning of some sections has been elucidated by a slight simplification of the text.

No attempt has been made to introduce any amendments of the Acts now in force; but when the Bill passes into law the time will be opportune for the framing of an amending Bill to incorporate such variations as have been found to be desirable. Proposals to this end have been under the fullest consideration for many years by the R.I.B.A., the technical societies, and others whose interests are involved.



ENGLISH PRECEDENT No. 108

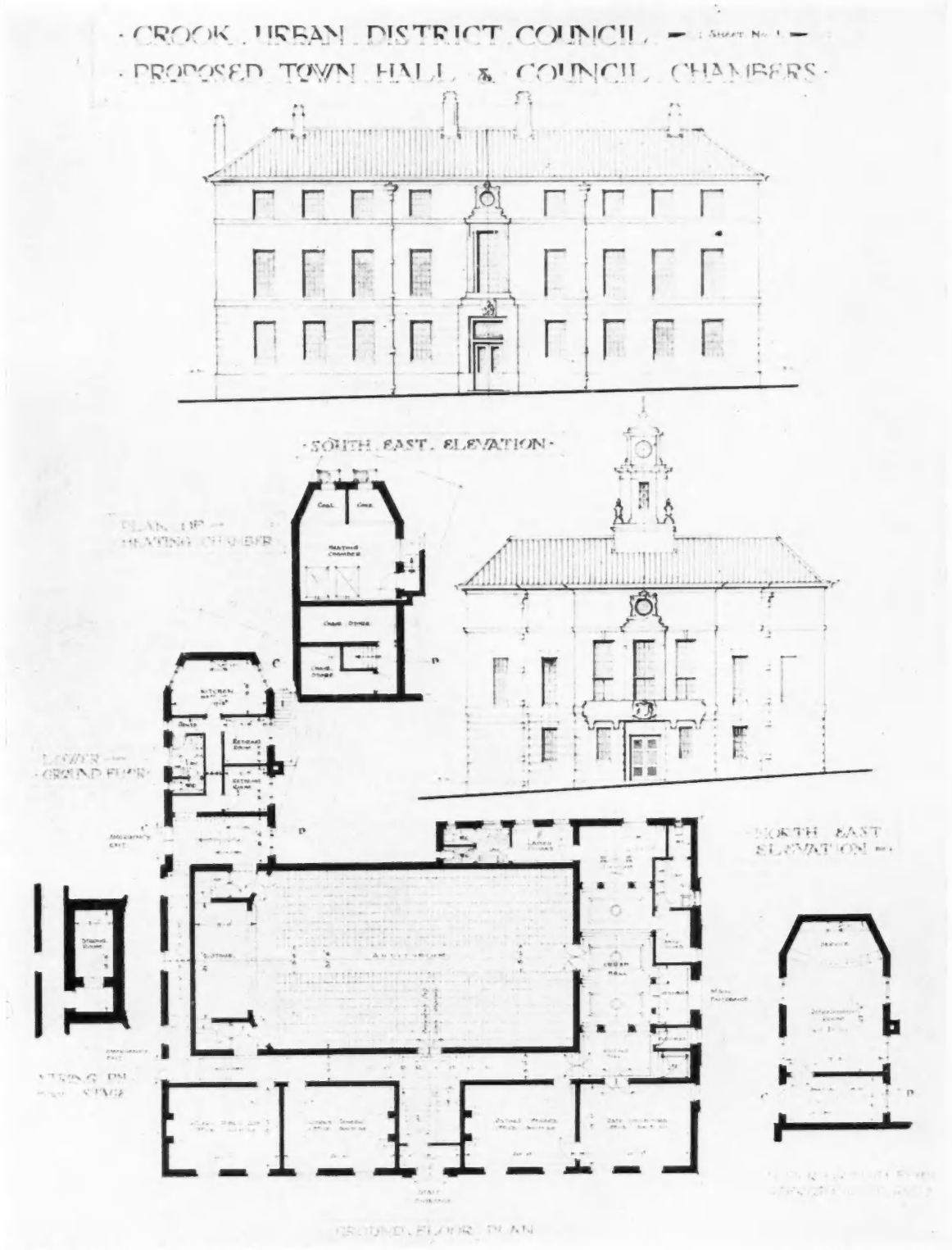
HOUSE IN BANBURY, OXON

This, at first sight, homogeneous assemblage of Tudor details resolves itself, on examination, into a hotchpotch, mixed and confused as only the early days of the Renaissance in England could produce.

The house itself emerges from the fortified keep, wearing still its crenellated headdress, even though the large windows have forgotten the art of defence. The porch, in which traditional mouldings play with importations from the Continent, bears proudly the arms of the owner, flanked by a pair of nervous, intruding columns, slim forerunners of a mighty invasion.

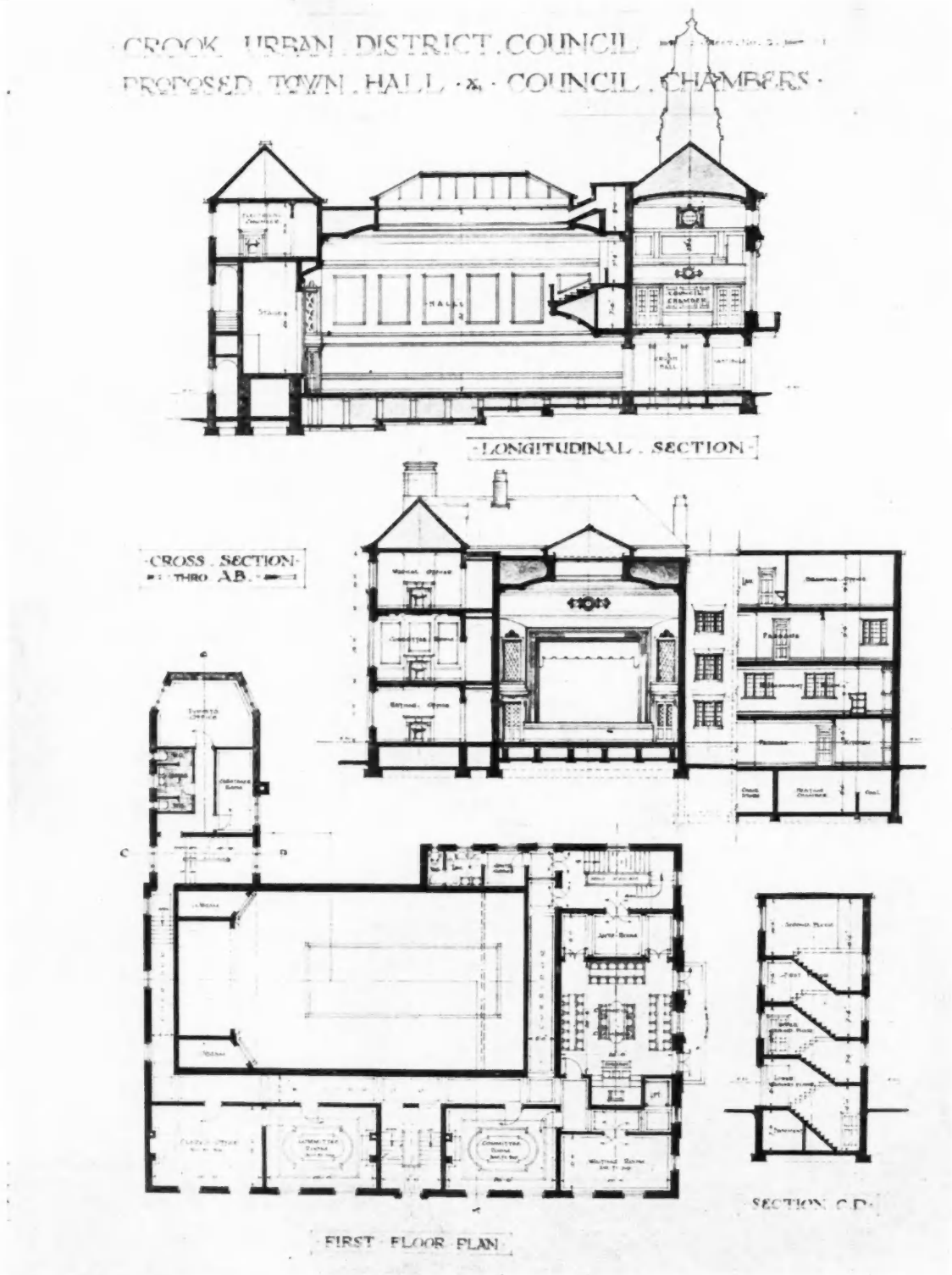
Everything about it is old now, and none of these things matters.

—[E. MAXWELL FRY.]



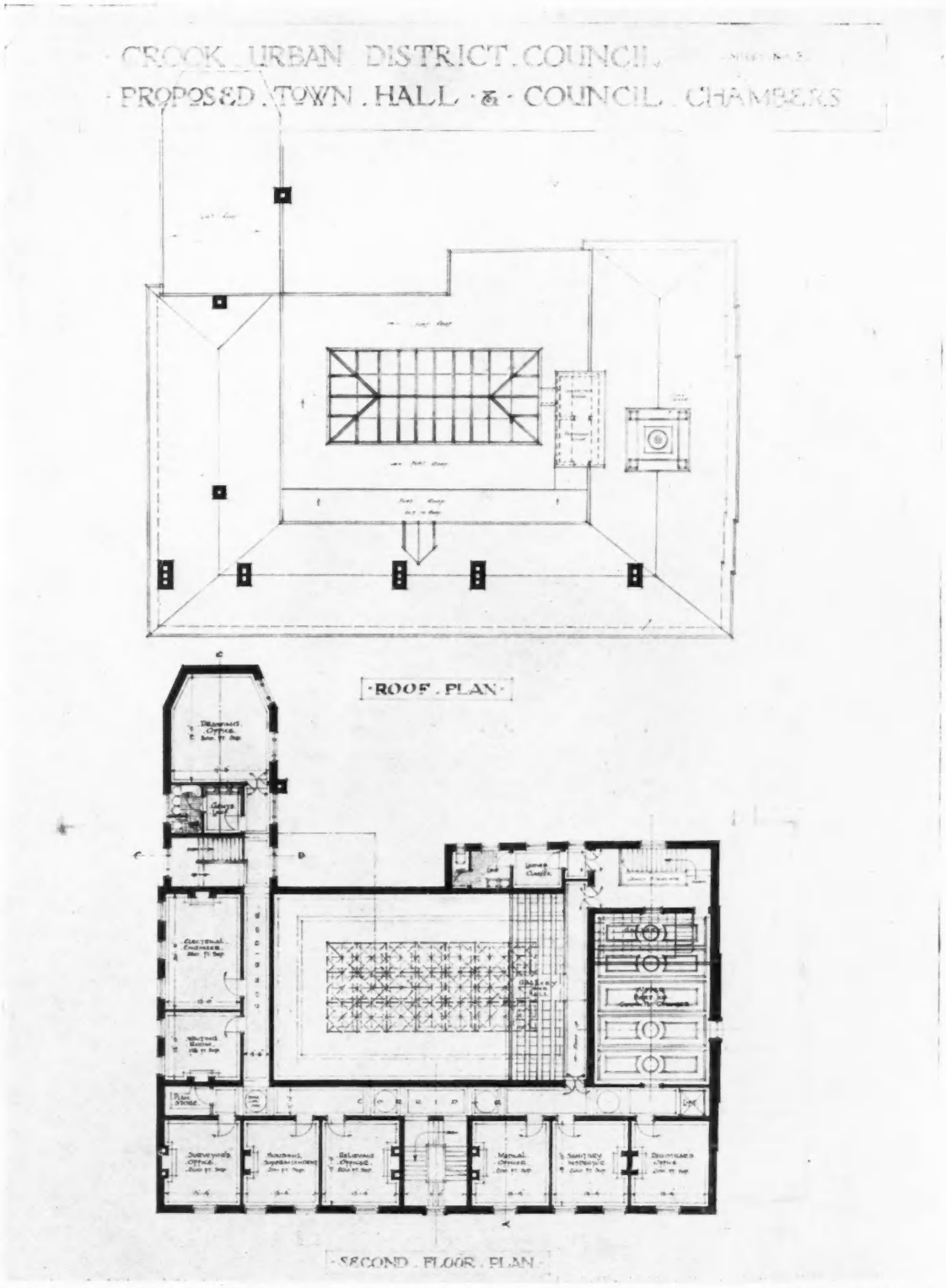
Crook Town Hall Competition. The Winning Design.] *[By Hicks and Charlewood.*

On this and the following three pages is illustrated the winning design in the Crook Town Hall competition. Mr. F. Willey, of Durham, the assessor, made his awards as follows: First, Hicks and Charlewood, Newcastle-on-Tyne; second, M. A. Cordingley, Durham; commended, Harrison and Ash, Newcastle-on-Tyne.



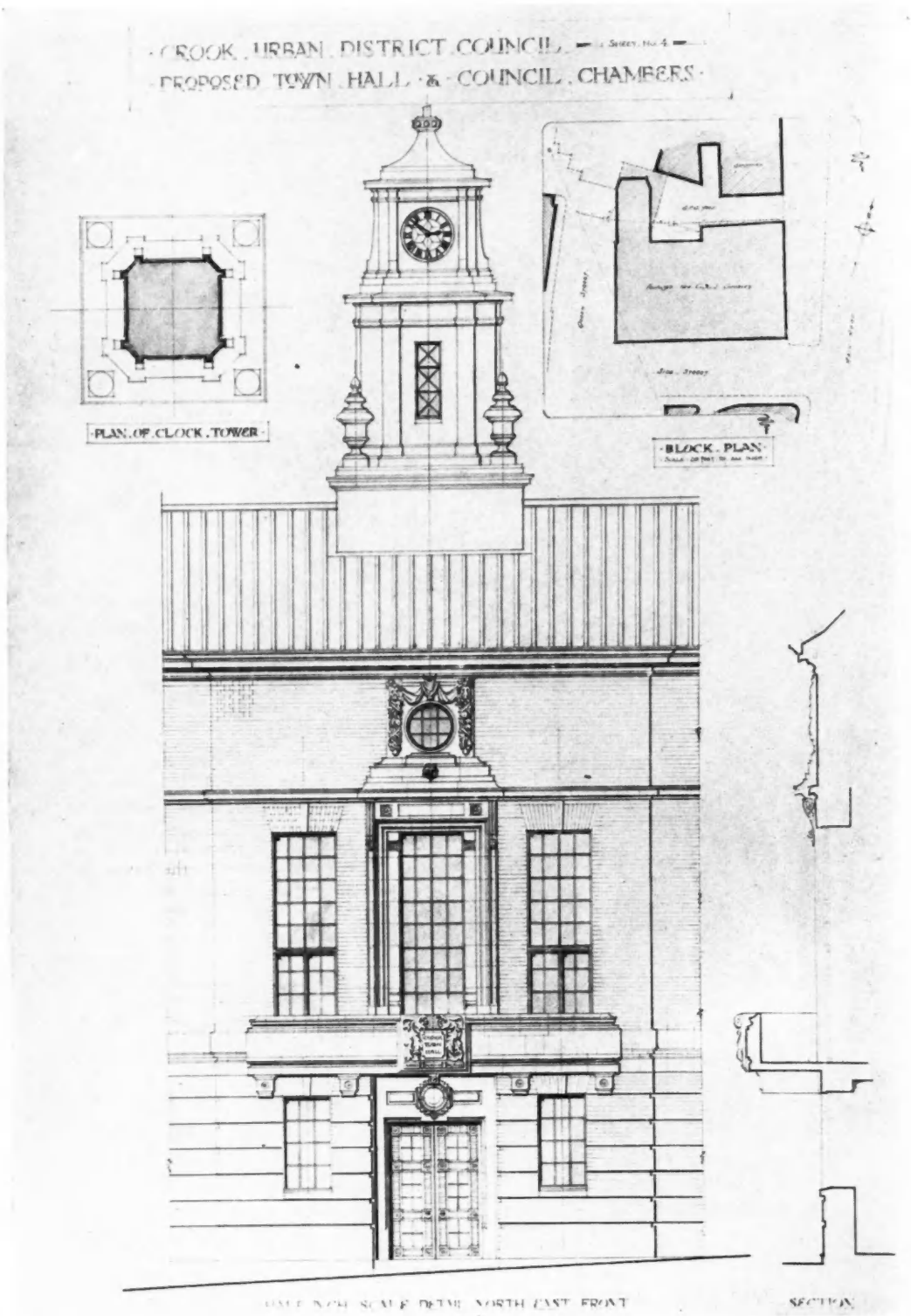
Crook Town Hall Competition. The Winning Design.] [*By Hicks and Charlewood.*

The most important feature of the first floor is the council chamber, with seating for thirty-six members of the Council, six officials, and three reporters. It is provided with a gallery with separate access for the public. The town hall, accommodating 500, and having a stage arranged for lectures, concerts and amateur plays, is planned on the ground floor (see previous page).



Crook Town Hall Competition. The Winning Design.] *[By Hicks and Charlewood.*

The second floor provides accommodation for officials of the Council. Crook is a small town with a population of about 13,000, in the centre of a mining and agricultural valley in the county of Durham. In addition to meeting the needs of the Council, the building would house, if necessary, local County Council officials engaged in public assistance and education work.



Crook Town Hall Competition. The Winning Design.] [*By Hicks and Charlewood.*

The block plan reproduced in this page of details shows the limitations of the site upon which the new town hall is planned. Exits from the building could only be arranged into Queen Street and no right of access or exit could be obtained from the General Post Office yard. The assessor of the competition estimates the cost of erecting the winning design as £18,355.

SOCIETIES AND INSTITUTIONS

ANNUAL RECEPTION OF THE A.A.

MR. F. WINTON NEWMAN, F.R.I.B.A., President of the Architectural Association, and Mrs. Newman, received the guests at the eighty-second annual reception which was held at 34 Bedford Square on Wednesday last. About 800 members and friends were present.

ULSTER ARCHITECTS' ANNUAL DINNER

Sir Banister Fletcher, P.R.I.B.A., was the principal guest at the annual dinner of the Ulster Society of Architects, held at Belfast. Mr. E. Kennedy, F.R.I.B.A., occupied the chair.

Dr. R. W. Livingstone, proposing the toast of "The Government of Northern Ireland," said it was satisfactory to know that in the near future they might look forward to a Town-planning Bill, and they also appreciated the Government's practical interest in architectural education, a matter of as great importance to local architects as to the public for whom they built and who received from them the buildings of the future.

The toast of the "R.I.B.A. and its Allied Societies" was proposed by the Recorder of Belfast, Judge Thompson, who spoke of changes in the popularity of styles of architecture, and said he sometimes wished there were not quite so violent or such sudden swings from one extreme to another.

Sir Banister, in response, said he was glad to learn that a regional planning scheme was about to be started in Ulster. It was very necessary to have such a scheme for a large and growing city like Belfast. The Greater London scheme now afoot covered an area of 20,000 square miles, and extended as far as twenty-five miles from the centre of the city. It was a big scheme, but a regional planning scheme must be big, and in London they were looking for a new town-planning measure that would stop ribbon development and prevent the erection of unsightly elevations. They were also up against the question of the erection of public buildings with the aid of the Office of Works.

He was also extremely interested to learn that there was a proposal to have a school of architecture attached to the University and under their own control. He hoped and trusted it would become an effective proposition, and he wished it every success.

POST-WAR ARCHITECTURE

Mr. Stanley C. Ramsey, F.R.I.B.A., lecturing in the Arts Building of the Manchester University on Post-War Architecture, said that extremely modernistic work was expressive of urban and suburban conditions, rather than of the more traditional conditions of the countryside. The work of modernist architects was an attempt not so much to replace the country house and the country cottage, as to offer an alternative to the work of the speculative builder; or, in other words, to try to clear up the industrial mess of the nineteenth century.

The design of both the interior and exterior of the post-war house, he added, seemed to show far greater changes than did the planning itself. For example, they might have a simplified Georgian house, indicative of modernistic tendencies on the part of the architect, with very thick brick walls and conventionally arranged rooms.

Speaking of the practical requirements embodied in a post-war house, the lecturer said that far greater importance was given to labour-saving devices and the demand for a greater number of bathrooms in proportion to the number of inhabitants. Quite small houses of four and five rooms nowadays frequently had two bathrooms, whilst any house with over five bedrooms had three bathrooms—one for the family, one for the guests, and one for the servants.

Mr. Ramsey concluded by saying that now that they could effectively warm their houses, not only by steam, but by electric panels in ceilings and walls, they had nothing to be afraid of in great areas of glass.

The lecture was profusely illustrated by lantern slides of modern work.

EDUCATIONAL POLICY OF THE INSTITUTE OF ARBITRATORS

The educational policy of the Institute of Arbitrators was the subject of a paper, read at a luncheon given by them to kindred bodies, by Mr. Alan W. Davson, F.S.I., Chairman of the Education Committee. Mr. E. S. Underwood, F.R.I.B.A., President of the Institute, was in the chair.

In considering the educational programme, Mr. Davson pointed out that the general policy of the Institute was never lost sight of, namely, to provide efficient arbitrators and to overcome the objections to arbitration which in the past have been made, not without some justification. The business man wanted an efficient arbitrator; they were looking forward and they felt that, whilst an arbitrator did not require, in addition to his specialist knowledge, to be in any sense a legal expert, he would not be fitted for the onerous position without an elementary knowledge of the law and procedure with which he had to deal. In the interest of the parties and the arbitrators, the Institute established, in 1926, a code of rules under which arbitrations conducted under the auspices of the Institute would be carried through. These rules were recently revised, and, in addition, a new code initiated to meet the needs of business men in suitable cases where all were agreed that the cost should be kept down to the minimum.

He invited the representatives of the various institutions present to give consideration to the following suggestions: (1) As their panels of tested arbitrators become depleted, to fill them from their own members who were also on the panel of the Institute of Arbitrators. (2) To make it clear to younger members that the dual qualifications would be looked upon with favour. (3) To assist the Institute to get its activities better known to members of the respective bodies by ways and means to be discussed.

In conclusion, Mr. Davson said that membership was not restricted to professional members, although it was hoped everyone eligible would assist the cause by joining.

Mr. L. S. Sullivan, Chairman of the Board of Architectural Education, offered a few warnings on the educational policy, which were gratefully accepted by Mr. Underwood on behalf of the Institute.

MR. MORRISON ON ELECTRICAL DEVELOPMENT

The annual luncheon of the British Electrical Development Association was held at the Savoy Hotel on Friday last. Captain J. M. Donaldson, chairman of the Association, presided over a gathering of about 400 members and guests.

Mr. Herbert Morrison, M.P., Minister of Transport, who was the principal guest, referring to progress in the electrical industry, said that the output of authorized undertakings in Great Britain had grown from 3,600,000,000 units in 1922 to 7,600,000,000 units in 1928. Substantial as this progress was, Britain was still much behind the United States of America, where the total output in 1928 was 97,000,000,000 units. It was claimed that 68 per cent. of the population of the United States were living in electrified homes, that 500,000 farms were electrified, and that three-quarters of all power in industry was electrical, while, in Britain, it was estimated that only 18 per cent. of the houses were wired, that not one in fifty of these was completely electrified, and that the present output represented only some 15 per cent. of the possible home field.

He pointed out that if British con-

sumption was to reach a level corresponding to that in the United States, our annual output should be 30,000,000,000 units instead of the probable 8,500,000,000 units in 1929.

He stated that the Electricity Commissioners, in association with the Ministry of Transport and the Central Electricity Board, had manifested great energy in the development of electricity supply, and it was his ambition as Minister of Transport to enable the work of these bodies to become even more effective than it had been, with the object of establishing a great nationally organized industry.

R.I.B.A. COUNCIL MEETING

Following are notes from a recent general meeting of the Council of the R.I.B.A. :

Examinations. The Board reported that one candidate had been examined for the R.I.B.A. Diploma in Town Planning and had been relegated.

R.I.B.A. Final Examination. It was decided, on the recommendation of the Board, to amend the regulations relating to the submission of Theses for the Final Examination by adding a fourth section, entitled "Town Planning," to the list of subjects.

R.I.B.A. Intermediate Examination. It was decided that the syllabus, which is at present "A paper on the General History of Architecture," be amended to read as follows : "A paper on the General History of Architecture up to and including the first quarter of the nineteenth century."

R.I.B.A. Intermediate Examination Testimonies of Study. It was decided that the existing regulation for Section C, Measured Drawings—which is as follows : "Section C, Measured Drawings. Sheets 4 and 5, Measured Drawings of an existing building or portion of a building, not of recent construction, to be selected by the candidate. His plottings and sketches are also to be submitted"—be amended to the effect that Section C, Sheet 4, shall consist of "Measured Drawings of an existing building or portion of a building, not of recent construction, to be selected by the candidate. His plottings and sketches are also to be submitted. Care must be exercised to select a building of architectural merit, and such essentials as stone jointing, etc., should be clearly indicated. If the candidate is in doubt as to a suitable subject he should communicate with the Secretary to the Board of Architectural Education. Sheet 5 shall consist of simple design based on the subject measured for Sheet 4 after that sheet has been approved by the Examiners."

Acoustics and the R.I.B.A. Final Examination. It was decided that (1) Two out of the six subjects set annually as R.I.B.A. Problems in Design be subjects involving a simple acoustic treatment with calculations to give the appropriate time of reverberation. It will be compulsory for all candidates before applying for admission to the Final Examination to include in the four Testimonies of Study at least one of these two subjects. (2) A list of articles and books on the subject be issued with each list of R.I.B.A. Problems in Design to guide candidates in obtaining the necessary information.

Schools. It was decided that the recognition of the three years' Degree Course and the three years' Diploma Course for exemption from the R.I.B.A. Intermediate Examination be continued.

Architectural Students and (a) Experience on Buildings in the Course of Erection and (b) Records of Historic Buildings. On the recommendation of the Board it was decided that : (1) The Institute of Builders be invited to draw up lists of builders willing to give facilities to architectural students for studying building work. (2) The Surveys in London and elsewhere be requested to furnish the R.I.B.A. with lists of typical or essential buildings which should be recorded. It is suggested that types of local building in all parts of the country should be included. (3) These lists when furnished to the R.I.B.A. be sent to the recognized Schools of Architecture.

Competition for new R.I.B.A. Building. On the recommendation of the Allied Societies' Conference it was decided that the competition for the new R.I.B.A. building be thrown open to members of allied societies as well as the members of the R.I.B.A.

The Institute of South African Architects and Registration. On the recommendation of the Registration Committee it was decided to make a grant of £100 to the Institute of South African Architects towards their expenses in securing the passing of the South African Architects' Registration Act.

Reinstatement. The following ex-members were reinstated. As Associates : Messrs. C. J. Brooks, Frank G. Geary, W. J. Leahy. As Licentiate : Mr. Ernest Pawley.

Five applications were approved for election as Licentiates under Section III. (f) of the Supplemental Charter of 1925.

The following member was transferred to the Retired Fellowship : Mr. John Bilson (elected Associate 1881, Fellow 1891).

Resignation. The following resignation was accepted with regret : Mr. William Finlayson, F.R.I.B.A.

Election of Students. The following Probationers were elected as Students of the R.I.B.A. :

Aitken, J. M. (Edinburgh College of Art).
Day, E. A. (Northern Polytechnic).
Dumville, M. R. (Northern Polytechnic).
Eaton, N. M. (University of Witwatersrand).
Furbur, E. R. (Liverpool School of Architecture).
Goodacre, N. W. (Liverpool School of Architecture).
Haywood, N. B. (Liverpool School of Architecture).
Hughes, H. J. (Welsh School of Architecture).
Kerr, F. A. (Edinburgh College of Art).
Laing, J. W. (Edinburgh College of Art).
McIntosh, W. G. (University of Witwatersrand).
McRae, D. G. W. (University of Toronto).
Martienssen, R. D. (University of Witwatersrand).
Miles, M. (Liverpool School of Architecture).
Nunn, A. V. (Special Exemption).
Stacy, E. F. (Northern Polytechnic).
Richards, I. F. B. (Welsh School of Architecture).
Smith, P. C. (University of Cambridge).
Turnor, C. R. (Architectural Association).

EARLY CHRISTIAN CHURCHES

Sir Banister Fletcher, P.R.I.B.A., described the Early Christian Churches in Syria and the Near East, and at Ravenna and Torcello in Italy, and also gave a brief description of Early Christian baptisteries and tombs, in his lecture at the Central School of Arts and Crafts on Wednesday last.

SHORT COURSES FOR TEACHERS

The Board of Education has arranged a short course of lectures for teachers in recognized technical colleges and schools, art schools, junior technical schools, etc., in England and Wales, to include the following subjects : Engineering science and electrical engineering, to be held at Oxford; and building, painting and decorating, gas engineering and gas supply and methods of teaching upholstery, to be held in London.

The lectures will be held in July. Further particulars may be obtained after April 1 on application to the Secretary, Board of Education, Whitehall, London, W.C.1.

ANNUAL DINNER OF THE NORTH STAFFORDSHIRE ARCHITECTURAL ASSOCIATION

The fourth annual dinner of the North Staffordshire Architectural Association was held at Stoke on March 18, with Mr. E. T. Watkins, president, in the chair.

Sir Banister Fletcher, P.R.I.B.A., in reply to the toast of the "R.I.B.A. and the North Staffordshire Architectural Association," proposed by Ald. F. Hayward, said that while there were regulations dealing with the thickness of the walls they were to build, the area and height of the rooms and the sanitary arrangements, the only things that the public saw were the elevations of buildings. They wanted, if possible,

to have some control in that respect. The treatment and control of elevations was essential, because they were seen by almost everybody, and, if possible, any offence to people's sense of beauty should be prevented.

Mr. Joseph Emberton, A.R.I.B.A., in proposing the toast of the "City of Stoke-on-Trent," expressed the hope that new buildings in that city would have much glass, and would be well ventilated and comfortably heated, and that they would really express what they were doing. In that way each building would attain an individuality which would be both interesting to the public and of commercial value to the proprietor. The advertising value of a building with individuality was very considerable. Hitherto they had tried to disguise it—to make it respectable by covering it up with some ancient form of ornament which had nothing to do with the job. Mr. Emberton thought that it was not a man's job to make pretty buildings, but to make useful ones, and discounted the value of the public control of elevations.

COMPETITION CALENDAR

March 31. — The Accrington Corporation invites architects of British nationality to submit designs in competition for new Police and Fire Stations which it is proposed to erect on a site in Manchester Road, Accrington. Assessor: Herbert J. Rowse, F.R.I.B.A. Premiums: £250, £150 and £100. Conditions of the competition, together with a plan of the site and all particulars, may be obtained from William Henry Warhurst, LL.B., Town Clerk, Town Hall, Accrington. Designs to be submitted before March 31.

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated this year. Assessors: Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums: £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs: April 28.

June 14. — The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit, £1 1s. Latest date for submission of designs: June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor: J. Ernest Franck, F.R.I.B.A. Premiums: £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall which is to be built on the site of the old town hall, at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

LAW REPORTS

PLANS FOR A CINEMA

Winstanley v. *Smith and Beech. Manchester Assizes*

This was an action for a breach of agreement in respect of the plans of a Winsford cinema. The case was heard at Manchester Assizes, when Albert Winstanley, architect, of St. Annes, was awarded £120 and costs against Richard Smith and John Beech, cinema proprietors, of Sandbach.

It was stated for the plaintiff that at the request of the defendants he prepared plans for alterations to the Magnet Cinema, Winsford. His charge was £246 15s. The alterations were not proceeded with, and at an interview which took place between the parties defendants complained that the charge was heavy, and offered to pay £25. Plaintiff refused to accept, but agreed to give a receipt in full settlement on consideration that they would employ him as architect of a new cinema which they proposed to erect at Sandbach. Later he learned that another architect had been engaged for that work. Defendants said they did not mention the new cinema at Sandbach during the interview, but promised that they would employ him as architect if they proceeded with the alterations at the Winsford Cinema.

FLAT LAW—RIGHT OF INGRESS AND EGRESS

Macmorran v. *Flats Construction Co., Ltd. Chancery Division. Before Mr. Justice Luxmoore*

This case raised a point as to the right of a tenant to free ingress to and egress from a flat by the front door of a block of flats at Queen's Gate, London, for herself and persons visiting her on business or otherwise.

Sir Thomas Hughes, K.C., for plaintiff, Mrs. Edith Kate Macmorran, said his client was the occupier of a flat on the fourth floor at 52 Queen's Gate, of which she took possession early in 1928. The hall porter was a servant of the defendants, her landlords, and she discovered that he was in the habit of questioning visitors to her flat as to the nature of their business. His instructions were that in some cases the hall porter had refused admission unless the individual produced a permit issued by the landlords. Her complaint under these circumstances was that the right of access to her flat had been seriously interfered with by the defendants. Plaintiff therefore sought a declaration that she was entitled to reasonable ingress and egress by the front door for all persons who wished to visit her.

Mr. F. Archer, K.C., for the defendants, said his clients had made a rule that persons coming to the flats to work should not be admitted to the building without a permit. The hall porter would, therefore, ask persons who were strangers the purport of their business. The tenants held their flats under a lease, and defendants' contention was that they had acted justifiably and reasonably having regard to the obligations of the lease.

His lordship held that the plaintiff was entitled to the declaration she sought, with costs. The document creating the tenancy, said his lordship, meant that the tenant should have all reasonable facilities for ingress and egress for herself and her visitors and all persons coming to the premises. There was no limitation as to the persons who were to have that right beyond the fact that they must be persons coming to the flat lawfully as guests or on the business of the plaintiff. He granted the declaration asked for with costs.

TRADE NOTES

The recently completed showrooms at 36 Newman Street, W.1, which the Merchant Trading Co., Ltd., has just opened for the convenience of architects, are designed to afford facilities to members of the profession for becoming practically acquainted with the series of building specialities now exclusively handled by this Company. These include various Celotex products, numerous examples of Metco, Woco and Laminex doors, and Salubra and Tekko wall coverings. The showrooms serve the purpose of exhibition galleries and embody in their construction and finish between forty and fifty decorative and acoustic applications of Celotex. In addition, they are equipped with apparatus for demonstrating the sound-absorptive and insulating properties of the material. Of particular interest to architects are the highly suggestive decorative effects produced by stencilling in colour directly on to the surface. Other applications illustrate the satisfactory results which untouched Celotex panels present when the nailed

margins at the joints are merely covered with 2½-in. strips of the same material, rounded at the edges with sandpaper. Where economy is a consideration—such as in housing work—this method of finishing has much to commend it.

How many miles of clear legible line can be made with 6 ins. of an HB. Venus pencil? The manufacturers have made a test—6 ins. of the pencil were used—and the mileage found. What was the mileage? It is a matter of drawing fine lines, which, if scientifically applied, will obtain nearest results. The manufacturers are giving a prize of £100 to the sender of the correct figure of their own sealed mileage (miles, yards, feet), or the estimate nearest their figure. If more than one correct (or nearest) result is given, the prize will be divided. The decision of the directors is final. The conditions of the competition are as follows: Buy a 4d. Venus HB. grade pencil at a stationer's and receive a coupon with it—then use the pencil—6 ins. only—fill in the coupon with name, address (in capitals) and estimate of mileage, and send, together with last inch stub of pencil, showing graded end. Estimates are to be sent to Competition Department, Venus House, Lower Clapton Road, E.5. Watch stationer's window for closing date and results.

The firm of John Booth and Sons, says Ashley Sterne, in an amusing introduction to *Problems of a Structural Engineer* by W. Heath Robinson, are "the men who put the bolt in Bolton, and thus succeeded in riveting the attention of every earnest student of the steeling art, from the days of the late Charles Peace up to the present time." "Do you want a nice bridge?" he asks. "They will make one to measure for you—a 'contract' bridge, guaranteed to score heavy honours. A dinky little theatre? They will erect you structural steelwork so stout that even the most famous 'star' would fail to bring the house down." All the sketches—and some are in colour—show Heath Robinson at his best. There are many laughs in every sketch, but perhaps the funniest is an extension of business premises without the dislocation of trade. The publication, however, has a serious side: the illustration of some of the more recent big contracts for which the firm has been responsible.

A new company, styled the General Asphalte Co., Ltd., has been established with registered offices at Australia House, W.C.2. The managing director is Mr. Stewart Mitchell, who has considerable experience of all branches of the asphalte industry, and the firm is run throughout by men having a wide knowledge of the trade. The company is in a position to carry out any work that may be entrusted to it, and is also able to supply and lay high-grade Seyssel asphalte from the well-known mines in the Bassin de Seyssel, France.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Boys and Girls' School, New Windsor (pages 485, 486 and 498-505). General contractors, Y. J. Lovell and Son, who were also responsible for the excavation, foundations, dampcourses, joinery, plaster, and fixing of stonework. Sub-contractors: Lawfords & Co., asphalt; Binfield Brick Co., bricks; Pearson Bros. and Campbell, artificial stone; Edward Wood & Co., structural steel; Kleine Patent Fire Resisting Flooring Syndicate, Ltd., fireproof construction; Ames and Finnis, tiles; Luxfer Ltd., patent glazing; Stevens and Adams, Ltd., wood-block flooring; R. I. W. Products, Ltd., waterproofing materials; G. N. Haden and Sons, Ltd., central heating and boilers; C. Harvey & Co., electric wiring and electric light fixtures; Leeds Fireclay Co., Ltd., sanitary fittings; J. Gibbons, Ltd., door furniture; Henry Hope and Sons, Ltd., casements and window furniture; Thomas Elsley, Ltd., metalwork; Lockerbie and Wilkinson, Ltd., cloakroom fittings.

House in Southway, Hampstead Garden Suburb, N.W.11 (pages 518–519). General contractors, F. Troy & Co., Ltd., who were also responsible for the electric wiring. Sub-contractors: Ames and Finnis, tiles; Jefferiss & Co., wood-block flooring; Granwood, Ltd., and C. Robinson (Cork), patent flooring; Rosser and Russell, Ltd., central heating; Teale Fireplace Co. (London), Ltd., grates; Davis Gas Stove Co., Ltd., gas fixtures; Gas Light and Coke Co., gasfitting; National Radiator Co., Ltd., boilers; Shanks & Co., Ltd., and John Bolding and Sons, Ltd., sanitary fittings; James Gibbons, Ltd., door furniture; Henry Hope and Sons, Ltd., casements.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office, by our own patent expert. All enquiries concerning inventions patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated, readers should apply to the Patent Office, 25 Southampton Buildings, London, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATION

7439. Symentis Products, Ltd., and Jones, W. A. Panels, blocks, etc., for constructional, etc., purposes. March 7.

SPECIFICATIONS PUBLISHED

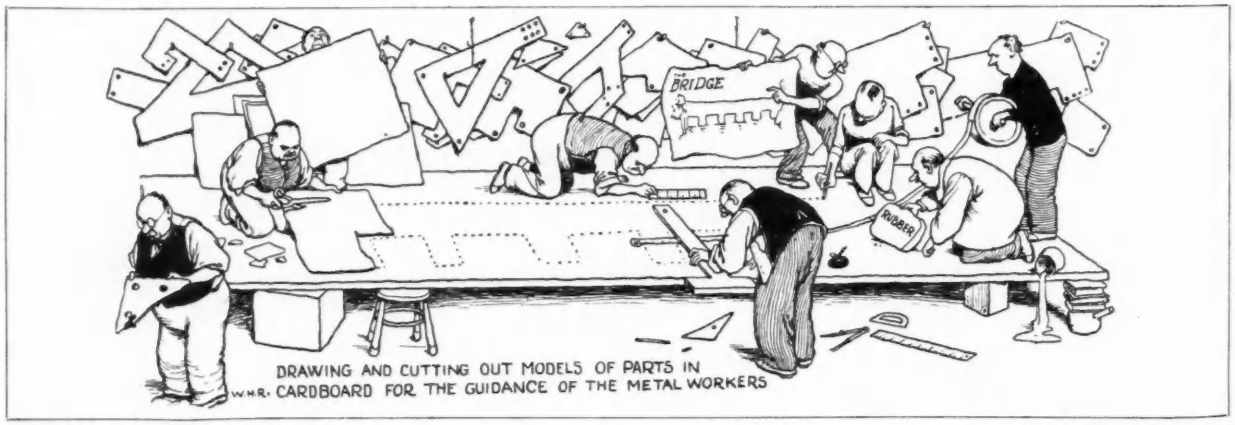
325911. Watson, J. A. Parquetry and like sectional flooring.

326012. Masterman, O. J., and Dixon, J. Concrete and analogous floor construction.

326124. Junkers, H. Structural members, more particularly for use in building walls.

ABSTRACT PUBLISHED

324184. Tabanou, J. Building blocks.



From Problems of a Structural Engineer.] [*By W. Heath Robinson.*

"Do you want a nice bridge? They will make one to measure for you—a 'contract' bridge, guaranteed to score heavy honours."

THE ARCHITECTS' DIARY

WEDNESDAY, MARCH 26

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Architects' Working Drawings. Until April 3. Also Students' Evening in connection with this Exhibition. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "Architecture of To-day and To-morrow." By Howard Robertson, M.C., F.R.I.B.A., S.A.D.G. Charles Marriott, HON. A.R.I.B.A., will preside. **8 p.m.**

GOLDSMITHS' HALL, Foster Lane, E.C.2. "Nature and Modern Design." By Professor R. V. Gleadowe. (Lantern Illustrations.) **7 p.m.**

L.C.C. SCHOOL OF ARTS AND CRAFTS, Southampton Row, W.C.1. "Roman Architecture." By Sir Banister Fletcher, F.R.I.B.A. **6 p.m.**

WEST SURREY BUILDING TRADES EMPLOYERS' ASSOCIATION. At the Lion Hotel, High Street, Guildford. "The Causes and Prevention of Dry Rot." By E. H. B. Boulton. **6.30 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Students' Meeting. "Nomography as Applied to Engineering." By Philip J. Pollock, B.A. Dr. Oscar Faber, O.B.E., M.INST.C.E., will occupy the chair. **6.30 p.m.**

MANSARD GALLERY, 196 Tottenham Court Road, W.1. Exhibition of Modern Glass and Colour Prints, Mansard Annexe. Exhibition of Landscape Painting. Open until April 17.

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C. 2. Open every Tuesday, Wednesday, Thursday, and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

IDEAL HOME EXHIBITION, Olympia, W. Organized by *The Daily Mail*. Open until April 17.

THURSDAY, MARCH 27

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At the Town Hall, Croydon. "The Construction of Modern Shop Fronts." By H. V. Lanchester, F.R.I.B.A. The Mayor of Croydon, Alderman T. Arthur Lewis, J.P., will preside. (Lantern Illustrations.) **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Some New Ideas on the Design of Dams." By E. Godfrey. **6.30 p.m.**

GEFFRYE MUSEUM, Kingsland Road, Shoreditch, E.2. "Lacquerwork: Its History, Influence and Decorative Qualities." By E. R. Gribble. **7.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Development in Machine Telegraph Systems and Methods of Operation." By H. H. Harrison. (Light refreshments, 5.30 p.m.) **6 p.m.**

FRIDAY, MARCH 28

INSTITUTION OF ELECTRICAL ENGINEERS. North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "Marine Diesel Installations, with particular reference to Auxiliary Machinery." By J. Calderwood, M.Sc. **7.15 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS. Midland Counties Branch. At the Chamber of Commerce Buildings, New Street, Birmingham. Annual General Meeting. Discussion on "Mechanical Solution of Statically Indeterminate Structures." To be opened by H. W. Coultas, M.Sc. **6.30 p.m.**

MASTER SIGN MAKERS' ASSOCIATION. First Annual Conference, to be opened by Arthur Chadwick, at the Holborn Restaurant (Kingly Street Entrance), W.C.1. **10.30 a.m.**

UNIVERSITY SETTLEMENT, Nile Street, Liverpool. Latest date for application for accommodation at the Housing and Town Planning Meetings.

SATURDAY, MARCH 29

Sunrise, 5.44 a.m. Sunset 6.27 p.m.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. Various lectures and conferences for children on "Beautiful England in Education." 3 and 6.30 p.m. Also visit to Welwyn Garden City. (3s. return.) Meet at rear entrance of Guildhouse at 2.30 p.m. **2.30 p.m.**

MONDAY, MARCH 31

CARPENTERS' COMPANY, Carpenters' Hall, E.C.2. "Charing Cross Bridge." By Arthur Keen, F.R.I.B.A.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Discussion on "Loud-Speakers." To be opened by Captain P. P. Eckersley. **7 p.m.**

ACCRINGTON COMPETITION. Latest date for submission of designs for the New Police and Fire Stations.

TUESDAY, APRIL 1

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Paper by H. Stratton Davis, M.C., F.R.I.B.A. **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. North-Western Centre. At the Engineers' Club, 17 Albert Square, Manchester. "The Imperial Chemical Industries, Ltd.'s Steam and Electric Power Plant at Billingham." By H. A. Humphrey, D. M. Buist and J. W. Bansall. (To be illustrated by a cinematograph film.) **7 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, Lancashire and Cheshire Branch. At the College of Technology, Manchester. Annual Business Meeting. **7 p.m.**

WEDNESDAY, APRIL 2

LONDON SOCIETY, Lancaster House, St. James's, S.W. 1. Visit to Wellington Barracks and the Guards' Chapel, under the guidance of Sir Neville R. Wilkinson, K.C.V.O., F.S.A. **2.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. "Building Craftsmanship." By Nathaniel Lloyd, O.B.E., F.S.A. Professor Charles H. Reilly, O.B.E., M.A., F.R.I.B.A., will preside. **8 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "Regional Planning." By Raymond Unwin, F.R.I.B.A. Helen Ward (Miss) will occupy the chair. (Lantern Illustrations.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Tees-side Sub-Centre. At the Cleveland Technical Institute, Middlesbrough. Annual General Meeting, 7 p.m. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." 7.30 p.m. **7 p.m.**

THURSDAY, APRIL 3

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. **7 p.m.**

FRIDAY, APRIL 4

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "The Decentralization of Industry." By Captain R. L. Reiss. Dr. Sybil Plant will occupy the chair. **8 p.m.**

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Council Meeting, 3 p.m. General Meeting, 6.15 p.m. **3 p.m.**

ROYAL SANITARY INSTITUTE. In the Council Chamber, Plymouth. Sessional Meeting. Discussion on "The Reconstruction and Reconditioning of Working Class Houses," to be opened by Councillor A. E. H. Webb. Edward Willis, M.INST.C.E., F.S.I., M.INST.T., will preside. **6 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Studies in Low-Power-Factor Measurements at High Voltages." By E. H. Rayner, D.Sc., W. G. Standring, M.A., R. Davis, M.Sc., and G. W. Bowdler, M.Sc. **7 p.m.**

SATURDAY, APRIL 5

Sunrise, 5.29 a.m. Sunset, 6.38 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Marble Arch Flats, adjoining Regal Cinema. Meet main doorway in Great Cumberland Place at 2.30 p.m. **2.30 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. Conference on "Planning the England of the Future." Hon. Humphrey Pakington, A.R.I.B.A., and A. T. Pike. 2.30 till 4.15 p.m. Professor Percy Dearmer, D.D. 5 till 6.30 p.m. F. J. Horms will occupy the chair on both occasions. (Lantern illustrations.) **2.30 p.m.**

ROYAL SANITARY INSTITUTE. In the Council Chamber, Plymouth. Discussion on "Port Sanitation," to be opened by Dr. P. B. P. Mellows. 10.30 a.m. Lunch at 1 p.m. Meet at Guildhall Square at 2.30 p.m. for visits (1) the Council Housing Estates; (2) the Co-operative Society's Pasteurising Plant: (3) the Hospital Ship "Flamingo" (weather permitting). **10.30 a.m.**

MONDAY, APRIL 7

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Antonio da San Gallo the Younger." By J. Hubert Worthington, O.B.E., M.A., A.R.I.B.A. **8 p.m.**

CARPENTERS' COMPANY, Carpenters' Hall, E.C.2. "The Rainbow." By Professor Wagstaff.

TUESDAY, APRIL 8

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Textile Lighting." By S. Anderson, B.Sc. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Royal Technical College, Glasgow. Annual General Meeting and Ordinary Meeting. **7.30 p.m.**

UNIVERSITY SETTLEMENT, Nile Street, Liverpool. At the David Lewis Club, Great George Place, Liverpool. Lectures on Housing and Town Planning subjects. Visits to new housing estates, tenements and slum districts. Papers will be given at 9.45 a.m. and 8 p.m. Applications for accommodation not later than March 28. Also lectures on April 9 and 10. **9.45 a.m.**

WEDNESDAY, APRIL 9

ARCHITECTURE CLUB, 229 Strand, W.C.2. At the Architectural Association, 34 Bedford Square, W.C. Supper. Discussion on "Relation of Sculpture to Architecture." Supper, 7.45 p.m. Discussion, 8.30 p.m. **7.45 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Preserving our Heritage." By Clough Williams-Ellis, F.R.I.B.A. Hon. Humphrey Pakington, A.R.I.B.A., will occupy the chair. **8 p.m.**

THURSDAY, APRIL 10

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Liverpool Cathedral." By Rev. Canon W. Thompson Elliott, M.A., Vicar of Leeds. (Lantern Illustrations.) **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Surge Investigations on Overhead Lines and Cable Systems." By S. W. Melsom, A. N. Arman, B.Sc. (ENG.), and W. Bibby, B.Sc. (ENG.). Light Refreshments at 5.30 p.m. **6 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. "Some Interesting Arc-Welded Jobs." By H. B. White and R. Tuddenham. (Lantern Illustrations.) **7.30 p.m.**

NORTHERN POLYTECHNIC, Holloway, N.7. Department of Architecture, Surveying and Building. Annual Speech Night. **7 p.m.**

FRIDAY, APRIL 11

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Excursion to Motor Vehicle and Engine Works of Messrs John I. Thornycroft, Basingstoke.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Modern Civilisation in the Country-side." By J. M. Kennedy. Professor Percy Dearmer, D.D., will occupy the chair. **8 p.m.**

ROYAL SANITARY INSTITUTE. At the Town Hall, Chatham. Sessional Meetings. Tea 4 p.m. Discussion on "Modern Elementary School Construction," to be opened by R. L. Honey, F.S.I., M.INST.M. and CY.F.; and "Special Difficulties in Housing," to be opened by T. Topping, F.S.I.A. Edward Willis, M.INST.C.E., F.S.I., M.INST.T., will preside. 4.30 p.m. **4 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Address by Colonel Sir T. F. Purves, O.B.E., President of the Institution. **6.15 p.m.**

SATURDAY, APRIL 12

Sunrise, 5.13 a.m. Sunset, 6.50 p.m.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. Visit to St. Albans. (2s. 6d. return). Meet at rear entrance of Guildhouse at 2.30 p.m. **2.30 p.m.**

ROYAL SANITARY INSTITUTE. At the Town Hall Chatham. Meet at Town Hall for visits to the Rochester and Chatham Joint Sewerage Works, the Royal Naval Hospital, and to a certified Milk Farm and Pasteurization Plant. **10 a.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Deptford Power Station of the London Power Co. **2.30 p.m.**

SUNDAY, APRIL 13

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Sunlight." By Dr. C. W. Saleeby, F.R.S.E. Clare Greet (Miss) will occupy the chair. **3.30 p.m.**

MONDAY, APRIL 14

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Decentralization of Industry." By Dr. Raymond Unwin. **5 p.m.**

CARPENTERS' COMPANY, Carpenters' Hall, E.C.2. "The Preservation of St. Paul's Cathedral." By Canon Alexander. The Lord Bishop of London will preside.

INSTITUTION OF ELECTRICAL ENGINEERS. North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. Annual General Meeting. Mersey and North Wales (Liverpool) Centre. At the Laboratories of Applied Electricity, The University, Liverpool. Annual General Meeting. Both meetings will be held at 7 p.m. Western Centre. At Cheltenham. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.) and L. C. Grant. **7 p.m.**

WEDNESDAY, APRIL 16

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Ultra-Violet Ray Transparent Window Glass." By S. English. **8 p.m.**

THURSDAY, APRIL 17.

IDEAL HOME EXHIBITION, Olympia, W. Last day of the exhibition organized by *The Daily Mail*.

THURSDAY, APRIL 24

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Architecture in its Relation to Modern Life." By Alfred C. Bossom, F.R.I.B.A. **6.30 p.m.**

FRIDAY, APRIL 25

INSTITUTION OF ELECTRICAL ENGINEERS. West Wales (Swansea) Sub-Centre. "Surge Investigations on Overhead Line and Cable Systems." By S. W. Melsom, A. N. Arman, B.Sc. (ENG.), and W. Bibby, B.Sc. (ENG.).

SATURDAY, APRIL 26

Sunrise, 5.43 a.m. Sunset, 8.14 p.m.

MONDAY, APRIL 28

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Architects' Drawings of 1800–1850." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. **8 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. General Meeting. "Aerial Surveying and Archæology." By O. S. G. Crawford. **8 p.m.**

WEDNESDAY, APRIL 30

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Annual General Meeting. **8 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

Plans passed at BALHAM: Showroom, offices and garages, Balham High Road, for Messrs. Sampson and Hutchcroft; addition to Messrs. Rawlings Manufacturing Co., Ltd.'s premises, Larch Road, for Mr. A. W. T. Richards; public-house, Bedford Hill, for Messrs. John Garratt and Sons, Ltd.; alterations, 167 and 169 Balham High Road, for Messrs. Chubb and Son.

The London, Midland and Scottish Railway is to provide a station on the L.C.C. housing estate at BECONTREE, near Church Elm Bridge.

The BERMONDSEY B.C. is borrowing £7,400 for the acquisition of a housing site in Rotherhithe Street and West Lane.

The CITY OF LONDON Corporation has passed plans for the rebuilding of 86-95 Leadenhall Street, Bury Street and Creechurch Lane, and also the rebuilding of 91 and 93 Charterhouse Street.

The CITY OF LONDON Corporation has under consideration a proposal to construct pedestrian subways at the junction of King William Street, Cannon Street and Gracechurch Street. This will necessitate the removal of the statue of King William IV.

St. Mark's Church Council has obtained a site at the corner of Grovelands Road and Downlands Road, COULSDON, for the erection of a church.

The CROYDON Corporation is obtaining tenders for the erection of eighty-four houses on the Mitcham Road Estate.

Plans passed by the CROYDON Corporation: Six houses, Ballards Way, for Mr. G. W. Peachey; eight flats, Lancaster Road, for Mr. S. Malthouse; nineteen houses, Covington Gardens, for Messrs. Thomas and Son; alterations and additions, 88-92 North End, for Messrs. J. Lyons & Co.; workshop, Stafford Road, for Harper Automatic Machine Co.; garages and stores, Beulah Road, for Messrs. Truett and Steel; showroom and sixty garages, Coombe Road, for Mr. L. H. Harrington; nine houses, Zermatt Road, for Mr. A. Andrews; classroom, Mersham Road, for Mr. H. Hemmings; two houses, Springfield Road, for Mr. W. Pritchett; alterations and additions, 6 Crown Hill, for Mr. H. Macintosh; shop, 150 High Street, for Mr. M. K. Matthews; fifty houses, West Way, for Messrs. M. Brown and Sons, Ltd.; twenty-four houses, High View Close, for Mr. J. M. Ross; vestry additions, Christ Church, Sumner Road, for Mr. T. F. M. Grant; seventeen houses, Foxle Road, for Mr. F. H. Willcocks; six houses, Berne Road, for Mr. W. T. Joyce; nurses' homes, Lennard Road, for Messrs. H. Berney and Son; house, Beulah Road, for Mr. W. F. Bond; alterations and additions, 259, Lower Addiscombe Road, for Messrs. Boots, Ltd.

The FULHAM B.C. has passed plans for buildings in Parsons Green Lane for the Metropolitan District Railway Co., and a building, in Addison Bridge Place, for Mr. W. E. Saunders.

The Great Western Railway Co. is to erect lock-up shops in the vicinity of West Brompton Station, Richmond Road, KENSINGTON.

The KENSINGTON B.C. is in negotiation with the L.C.C. regarding an improvement at Warwick Gardens and Warwick Road, where the Prudential Assurance Co., Ltd., is about to re-develop land.

Plans passed by the KENSINGTON B.C.: Additions, rear of 8 Edge Street, abutting upon Kensington Place; building, Fulham Road; additions, "Churchill Arms" public-house, Church Street; building, Holland Park Avenue and Ladbroke Grove.

The East Ham Corporation has asked the borough engineer to report as to the erection of a bridge across the River Roding, at LITTLE ILFORD.

The L.C.C. reports that since the war it has erected 37,510 houses and tenements, and that 3,051 houses are now in course of erection.

The L.C.C. has adopted a scheme for raising the standard flood level of the Thames, which is estimated to cost at least £500,000.

The Metropolitan Railway Co. has in view proposals for developing property between Chapel Street, Burne Street and Mitcham Street, MARYLEBONE.

Plans passed by the MARYLEBONE B.C.: Block of flats, Abbey Road, for Mr. G. Wills; building, Seymour Place, Wythburn Mews and Williams Mews, for Messrs. Joseph; building, Hallam Street, for Mr. S. H. Burdwood.

The L.C.C. proposes to lease three sites on the St. Helier estate, MORDEN, for the erection of model public-houses on lines similar to those at Becontree.

The L.C.C. is arranging for the provision of travelling facilities to MORDEN, where the St. Helier housing estate is being developed. The estate is 825 acres of land in extent, and 10,000 houses are to be built.

Plans passed by the STOKE NEWINGTON B.C.: Additions, 111 High Street, for Messrs. Robertson and Charles, Ltd.; buildings, Carysfort Road, for Messrs. Chamberlain and Willows; building, Church Street, for Messrs. A. J. King, Ltd.

The WANDSWORTH B.C. has authorized the preparation of schemes for the improvement of the Saxby Street and North Street area, at CLAPHAM.

Plans passed by the WANDSWORTH B.C.: Addition to Messrs. Aluminium Plant and Vessel Co., Ltd.'s premises, Point Pleasant, Southfields, for Messrs. Sampson and Hutchcroft; bungalow, Leigham Court Road, Streatham, for Mr. L. A. Gorringe; house, Dover House Road, for Messrs. W. Willett, Ltd.

Plans passed by the WESTMINSTER City Council: Additions, 22 Bruton Street, for Messrs. Lenygon and Morant, Ltd.; buildings, Petty France, for Mr. B. L. Suteliff; two subways connecting Cavendish Hotel, Jermyn Street, for Messrs. Wimperis, Simpson and Guthrie; bridge across Brick Street, connecting Park Lane Hotel extension with hotel offices, for Mr. Henry Tanner.

Mr. R. S. Campbell is obtaining further land from the WESTMINSTER City Council, in connection with his proposals for rebuilding property in Wardour Street.



House in Southway, Hampstead Garden Suburb, N.W.11. Designed by Slater and Moberly. The walls are of brick, and metal casement windows have been fitted. The roof is covered with tiles. *For plans see page 519.*

SOUTHERN COUNTIES

The BEXHILL Corporation recommends the construction of a further fifty houses.

Plans passed by the BEXHILL Corporation: Two houses, Cooden Drive, for Mr. J. E. Maynard; addition, "The Playhouse," Western Road, for Mr. S. C. Addison; two houses, Barnhorn Road, for Mr. C. Thurloe; bungalow, The Byeway, for Mr. G. E. Matthews; two houses, De La Warr Road and Richmond Grove, for Mr. G. Cash; house, Pebsham, for Mr. L. Turner.

The BOURNEMOUTH Housing Committee has decided to invite fresh tenders for the erection of forty-three houses at Luckham Road.

The BOURNEMOUTH Education Committee has decided to prepare plans for the erection of new buildings on the Lowther site, comprising classrooms, chemistry and physics laboratories, central hall, art room, library, etc., at a maximum cost of £25,000.

Plans passed by the BOURNEMOUTH Corporation: Garage and flats, 263 Holdenhurst Road, for Messrs. Lawrence; alterations and additions, 366 and 368 Holdenhurst Road, for Mr. F. F. Tarrant; two houses and shops, Tuckton Road, for Mr. S. Kermode; six houses, Covena Road, and Seafield Road, for Messrs. M. Brown and Sons; building extension, rear of 10 Kemp Road, for Messrs. J. Clark and Sons, Ltd.; four houses, Truscott Avenue, for Mr. G. F. Jordan; additions, Hinton Road and Gervis Place, for Messrs. Beales, Ltd.; meat store shop, St. Swithun's and Holdenhurst Roads, for Messrs. Swift & Co.; showroom and garage, Christchurch Road, for the Stanbourne Motor Co.; alterations, the Westover Garage, Westover Road, for Westover Garage, Ltd.; eight shops, Bloomfield Avenue and Wimborne Road, for Mr. F. Moorman: house, Roslin Road, for Mr. H. C. Barnes; house, Cranleigh Road, for Mr. E. W. Patrick; additions, Alma Road, for Messrs. Gibson and Hawke; house, Nursery Road, for Mr. A. E. Hand; four houses, West Way, for Mr. S. G. Ward; house, Southwood Avenue, for Mr. W. W. Avins; two houses, Fenton Road, for Mr. W. H. Elcock; house, Ravenscourt Road, for Mr. H. E. Rooke; house, Tuckton Road, for Mr. E. W. Patrick; additions, rear of 29 St. Catherine's Road, for Messrs. Eldridge Pope & Co.; house, Carbery Avenue, for Mr. T. Millson; workshop addition, Darracott Road, for Mr. W. A. Florey; house, Woodland Avenue, for Mr. H. Curry; house, Victoria Avenue, for Mr. E. C. Coffin; two houses, Petit Road, for Mr. J. Cole; house, Rothesay Road, for Messrs. A. C. Barnes & Co.; mission hall, Cranleigh Road, for the trustees; house, Glenferness Avenue, for Mr. J. Thornley; thirty-six houses, Ilford Lane, and six houses, Seafield Road, for Messrs. M. Brown and Sons; roller-skating rink, Wimborne Road, for Mr. J. M. Blackwell.

The HASTINGS Corporation is considering a scheme for a bathing pool at West St. Leonards, at a cost not to exceed £40,000.

Plans passed by the HASTINGS Corporation: House, Battle Road, St. Leonards, for Messrs. Pettet Bros.; six houses, Bexhill Road, St. Leonards, additions, Hastings Station yard, and additions, Buchanan Hospital, Springfield Road, St. Leonards, for Messrs. Ward, Son and Wray (architects); laundry, Crabtree House, The Highlands, St. Leonards, for Mr. D. M. Wilson (architect); store, Viaduct, Linton Crescent, two houses, Edmund Road, and six houses, Charles Road West, for Mr. H. M. Jeffery (architect).

The PORTSMOUTH Education Committee has estimated a sum of £40,000 will be needed for permanent premises, for the junior technical school.

The PORTSMOUTH Corporation Education Committee reports that proposals for the expenditure of £107,360 on the Northern secondary schools have now been approved. The erection of the schools will be commenced in the near future.

SOUTH-WESTERN COUNTIES

Plans passed by the DORCHESTER Corporation: Stores, South Street, for Messrs. Sercombe and Hayes; two houses, Louise Road, for Mr. H. E. Tite; workshop, South Street, for Messrs. Harding and Son; shop, South Street, for Messrs. F. W. Woolworth & Co., Ltd.

The PLYMOUTH Corporation has obtained sanction to borrow £20,478 for the purchase of land for the purpose of the aerodrome at Roborough.

The TRURO Housing Committee is considering the acquisition of the "George and Dragon" site for housing purposes.

The WEYMOUTH Corporation has arranged terms with Messrs. Milner, Son and White, landscape architects, for the preparation of a scheme for the development of Nothe and Sandfoot Castle lands.

MIDLAND COUNTIES

The WALSALL R.D.C. is to erect twenty houses in Winterley Lane, Rushall.

The WALSALL Corporation has obtained sanction for a loan of £3,500 for the erection of dwellings in Bentley Drive.

EASTERN COUNTIES

Plans passed by the BEDFORD Corporation: Offices, Castle Lane, for the Consumers Tea Co., Ltd.; swimming bath, Bedford School, for Messrs. S. Foster, Ltd.; conversion into boarding house, 12 Rothsay Place, for Mr. O. P. Milne; house, De Parys Avenue, for Mr. W. E. G. Hull; additions, 112-114 Bromham Road, for Mr. E. H. C. Inskip; alterations, Midland Road, for Messrs. Woolworth & Co.; additions, 132 Bromham Road, for Mr. H. Bowler; alterations, Midland Road, for Mr. F. Edward Jones, on behalf of the Empire Cinema.

The LOWESTOFT Corporation has obtained sanction to borrow £11,491 for the development of the Nicholas Everitt Park, including the following: New buildings, gardener's lodge, lay-out of grounds and tennis courts, etc.

Plans passed by the LOWESTOFT Corporation: Store, shop and office, Battery Green, for Messrs. Hobson & Co., Ltd.; alterations, Kirkley Post Office, Carlton Road, for Mr. R. Plant; alterations, Harbour Hotel, for Harbour Hotel, Ltd.; three houses, Alma Road, for Mr. R. Lowe; house, Colville Road, for Mr. V. Castleton; two houses, Laurel Road, for Mr. F. W. King; bungalow, Kirkley Run, for Mr. R. Sewell; steel-framed saw mills, Belvedere Road, for Messrs. Jewson and Sons; two steel garages, Sussex Road, for Mr. S. A. Waller; alterations to theatre, The Marina, for the Eastern Amalgamated Theatres, Ltd.; garages, Kirkley Cliff Road, for Mr. Cockrell; twelve houses, Beccles Road, Oulton Broad, for Mr. G. A. Gaze.

NORTHERN COUNTIES

The BLYTH Corporation Housing Committee is considering the erection of thirty-one houses in Tenth, Twelfth and Fifteenth Avenues.

The West Riding C.C. is to reconstruct Bankfoot Bridge, HEBDEN, at an estimated cost of £15,000.

The HULL Corporation has acquired a site for the erection of a depot and sub-station for the electricity department.

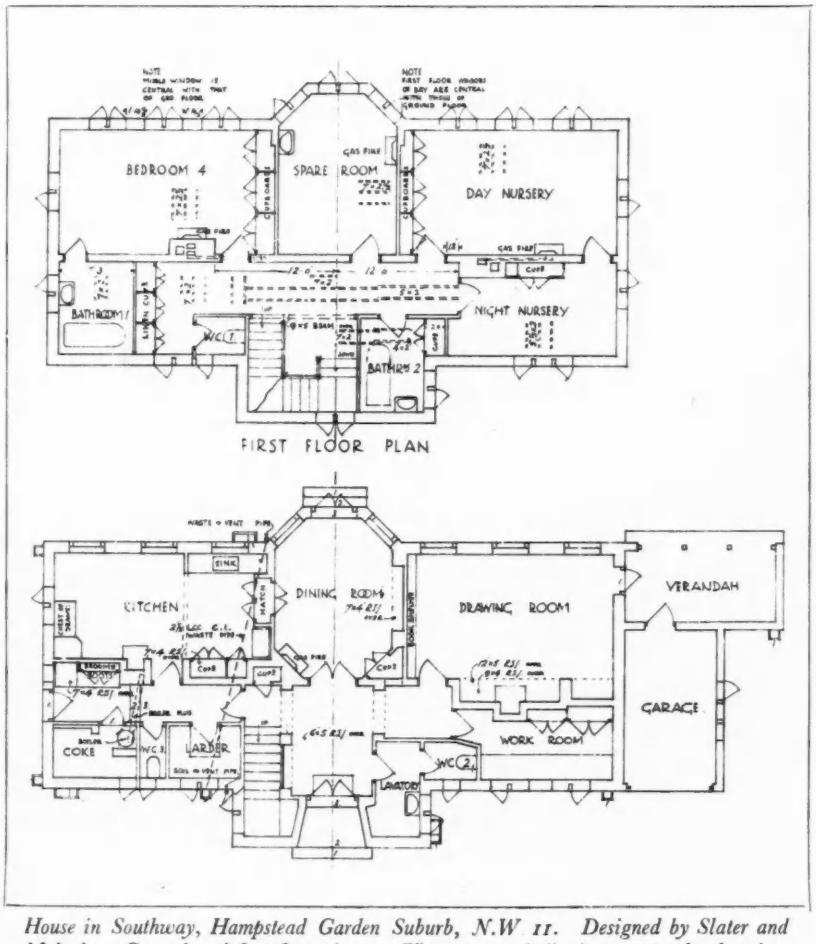
The West Riding Education Committee has passed an estimate of £12,000 for the erection of a primary school for 400 children at MEXBOROUGH.

Plans passed by the PENRITH U.D.C.: Eighteen houses, Fell Lane, for Mr. J. Kitchen; shop, 9–10 Middlegate, for Messrs. Paterson and Thomas.

Plans passed by the SHIPLEY U.D.C.: Office, Spring dyeworks, for Messrs. Fearnley Bros., Ltd.; fourteen houses, High Busy Lane and New Street, for Messrs. Mellor and Booth; additions to works, Otley Road, for Messrs. Revill Carter & Co.; thirty-two houses, Nab Wood Terrace and Nab Wood Road, for Messrs. Wm. Pitts and Sons; store rooms, Station Road, for Scientific Roads, Ltd.

The West Riding C.C. is seeking sanction to borrow £22,500 for the proposed reconstruction of Baildon Bridge, in the SHIPLEY area.

The SOUTH SHIELDS Corporation has asked the borough engineer to prepare a scheme for the erection of two- and three-room flats at Tyne Dock land.



House in Southway, Hampstead Garden Suburb, N.W 11. Designed by Slater and Moberly. Ground and first floor plans. The entrance hall gives on to the drawing, dining, and work rooms, and also a corridor leading to the kitchen. Access to the garage can be obtained from the verandah.

The STALYBRIDGE Corporation has passed plans for extensions to offices at the Tame Valley generating station for the Stalybridge, Hyde, Mossley and Dukinfield Tramways and Electricity Board.

The WAKEFIELD Corporation has obtained sanction for a loan of £76,200 for the purchase of land as Eastmoor, and the erection, by direct labour, of 150 houses.

The WAKEFIELD Corporation has purchased the King's Mill and other property required in connection with the construction of the new Wakefield bridge.

Plans passed by the WAKEFIELD Corporation: House, Milnthorpe Lane, for Mr. J. P. Firth; additions and alterations, Northgate, two houses, Dewsbury Road, for Messrs. Kay and Lunan; two houses, Carr Lane, for Mr. H. Dobson; house, Kensington Road, for Mr. J. D. McLeod; additions and alterations, York Street Hotel, for the Springwell Brewery Co., Ltd.

The WEST RIDING C.C. has passed a revised estimate of £15,000 for improving and extending the farm buildings at Askham Bryan agricultural centre.

The WEST RIDING C.C. is seeking a grant towards the expenditure to be incurred in establishing the Oulton Hall Colony for mental defectives.

WALES

The SWANSEA Corporation has decided to erect 200 additional houses at Townhill.

The SWANSEA Corporation has decided to obtain tenders for the Fforestfach and Waunarlwydd drainage scheme, which is estimated to cost £108,000.

Plans passed by the SWANSEA Corporation: Alterations, 269 Oxford Street, for Messrs. T. Thoroughgood & Co., Ltd.; warehouse, 27 and 28 Park Street, for the South Wales Furnishers, Ltd.; four houses, Bohun Street, for Mr. John Willis; house, Zouch Street, for Mr. J. Jewell; additions, Cwm Garnlwyd, for Messrs. E. and D. Lewis; alterations, Cwmrhydyceirw, for Mr. A. Ellis; house, Llangyfelach Road, Clasmont, for Mr. D. H. Jones; new road off Pentregethin Road, for Mr. J. I. James; two houses, Middle Road, for Mr. C. Williams; house and shop, Birchgrove Road, for Mr. W. Roberts; recreation ground, Bethesda Street, for the G.W.R. Social and Educational Union; additions, *Daily Leader* building, for the Swansea Press, Ltd.; two houses, Goitre Fawr Road, for Messrs. J. C. Oliver & Co.; house and shop, Waunwen Road, for Mrs. M. Tucker; two houses, Goitre Fawr Road, for Messrs. M. Davies & Co.; house, Penyrheol Drive, for Messrs. J. C. Oliver & Co.; sixteen houses, new road, off Cockett Road, for Mr. Syd Davies; house, Le Mayals, for Mr. J. R. Heath; alterations, The Dunns, for Messrs. Lloyds Bank, Ltd.; additions, 26 Oxford Street, for Messrs. W. R. Tarr, Ltd.; rebuilding, 31 Waterloo Street, for Messrs. J. Bloomberg and Son; two new streets and fifty-two houses, Garnglas Estate, for Messrs. T. and G. Spragg.

SCOTLAND

The GLASGOW Corporation is negotiating for sixty-two acres of land at Victoria Drive, for a housing scheme.

The GLASGOW Parish Council is to erect a new reception block and to carry out alterations to the maternity block at Stobhill Hospital.

The GLASGOW Corporation Libraries Committee has passed plans, prepared by the city engineer, for the erection of a branch library at Barrhead Road, Pollokshaws, at an estimated cost of £20,000.

At a meeting of the GLASGOW Corporation Housing Committee, the housing director submitted plans of the proposed development of the site at Carntyne Hall Road, Carntyne, showing twenty-four houses of four apartments and eight of three apartments, and twelve shops. He was authorized to obtain offers for the construction of the tenements.

Plans passed by the GLASGOW Corporation: Terraced houses, Randolph Road, for Messrs. P. T. Wilson and Son; two bungalows, Roxburgh Circus, Cardonald, for Messrs. W. and G. Taylor; temporary church hall, Castlemild Road, King's Park, for the Church of Scotland Presbytery; three shops, Garteraig Road, Riddrie, for Messrs. James Parker, Ltd.; roads, drains and sewers, Broomhill, for Messrs. A. and R. B. Stewart.

The GLASGOW Corporation Housing Committee has passed plans for the erection of eighteen two-apartment and forty-eight three-apartment houses on the Whiteinch estate.

MISCELLANEOUS

Plans passed by the DOUGLAS (I.O.M.) Corporation: Improvements, Athol Hotel, for Athol Hotel Co.; parish hall, for the vicar and wardens of St. Ninian's Church; rebuilding, Stand Street, for Messrs. G. N. Gore and Sons.

The NEWPORT (I.W.) Corporation is considering the provision of a bathing pool with shelters, abutting on the Medina and adjacent to the Seaclose recreation ground.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I s. d.	II s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_3	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1¾
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B_1	Chatham ..	S. Counties	1 4½	1 0½
B_1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_3	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_3	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate ..	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_3	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_3	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2¾
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_3	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_3	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_3	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_3	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2¾
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_3	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1¾
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2¼
A_3	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_3	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_3	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_3	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_3	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 10 0
Pit gravel, per yd.	0 15 0
Pit sand, per yd.	0 12 6
Washed sand, per yd.	0 13 0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2 8 0
Lias lime, per ton	2 0 0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1 3 0	*Trailer*	£0 15 0
3-ton motor lorry	3 15 0	*Steam roller*	4 5 0
Steam lorry, 5 ton	4 0 0	*Water cart*	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	
IF left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
DO. 5 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	1 17 6
DO. 6-2-1, per yd. cube	1 12 6
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 14 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 3 0
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0 0 10
DO. *6 in., per ft.*	0 1 3
DO. *9 in., per ft.*	0 2 3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 5 6
DO. *6 in., per yd.*	0 8 0
Portland cement and sand, see "Excavator" above.	
Leadwool, per cwt.	£2 0 0
Gaskin, per lb.	0 0 4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4 5 6
Flettons, per M.	2 12 6
White facing bricks, per M.	5 0 0
Multi-coloured facings, per M.	7 7 9
Best red facings, per M.	7 7 9
Rubbers, 9½ in., per M.	12 0 6
Staffordshire blue, per M.	9 5 0
Firebricks, 2½ in., per M.	9 5 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. *headers, per M.*	20 10 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	£2 11 6
Mixed lime mortar, per yd.	1 6 0
Dampcourse, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll*	0 7 6
DO. *18 in. per roll*	0 9 6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30 0 0
DO. in cement do., per rod	32 10 0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0 1 0
BEDDING plates in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING do. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
DO. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
DO. picked stocks, per ft. sup. extra	0 0 7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0 4 9
DO. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side, per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in., per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around gullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 9
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 11 0
York templates sawn, per ft. cube	0 7 6
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	

HOISTING and setting stone, per ft. cube	£0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.	
PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4
HALF SAWING, per ft. sup.	0 1 0

Add to the foregoing prices, if in York stone, 35 per cent
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	£0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 7 6
YORK SILLS, W. & T., ft. cub. fixed	1 10 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 3
DO. 2½ in. thick, per ft. sup.	0 1 6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies	£14 0 0
Countess	23 0 0
Duchess	32 10 0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8 3 9
Grey-green do., per ton	7 3 9
Green peggies, 12 in. to 8 in. long, per ton	5 13 9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 2 2
Cement and sand, see "Excavator," etc., above.	
Hand-made tiles, per M.	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 6
DO. *Peggies, per ton*	7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6 7 0	
Grey-green do.	5 9 0	
Green peggies, 12 in. to 8 in. long	4 13 6	

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3 17 6
DO., machine-made do., per square	3 7 6
Vertical Tiling, including pointing, add	18s. 0d. per square.
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22 0 0
11 × 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 4 6
DO. *T. and G., 1 in., per sq.*	1 4 6
Planed boards, 1 in. × 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 1 6
Mahogany, Honduras, per ft. sup. of 1 in.	0 1 4
DO. *Cuba, per ft. sup. of 1 in.*	0 2 6
DO., *African, per ft. sup.*	0 1 3
Teak, per ft. sup. of 1 in.	0 1 2
DO., *ft. cube*	0 14 0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 4 6
DO. framed in floors, roofs, etc., per ft. cube	0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube	0 8 6
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0 0 4½
DO. 9 in. wide and over per ft. sup.	0 1 2

[*continued overleaf*

CARPENTER AND JOINER : *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT, feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic :			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup..	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup..	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work :			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS :			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY :			
Fixing only (including providing screws) :			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour ;* MATE, *do.* 1*s.* 3½*d. per hour ;* ERECTOR, 1*s.* 8½*d. per hour ;* FITTER, 1*s.* 8½*d. per hour ;* LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel :			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour ;* MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc. :			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt..	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only :			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour ;* LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass : 4ths in crates :			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* "	0	2	3
DO. *6 ft. sup.* "	0	2	6
DO. *20 ft. sup.* "	0	3	1
DO. *45 ft. sup.* "	0	3	3
DO. *65 ft. sup.* "	0	3	5
DO. *100 ft. sup.* "	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet. 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour ;* LABOURER, 1*s.* 3½*d. per hour ;* FRENCH POLISHER, 1*s.* 8½*d. per hour ;* PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	0	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.
The measured work price is on the same basis . . per ft. sup. £0 0 2½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	3
Asbestos sheeting, 3/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain " diamond " per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 3/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1	0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1	6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1	0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—	—

720.5 v.71 pt.2



LOGGIA, WITH SLEEPING BALCONY AND ORATORY ABOVE: HOUSE ON ADDINGTON PARK ESTATE, SURREY

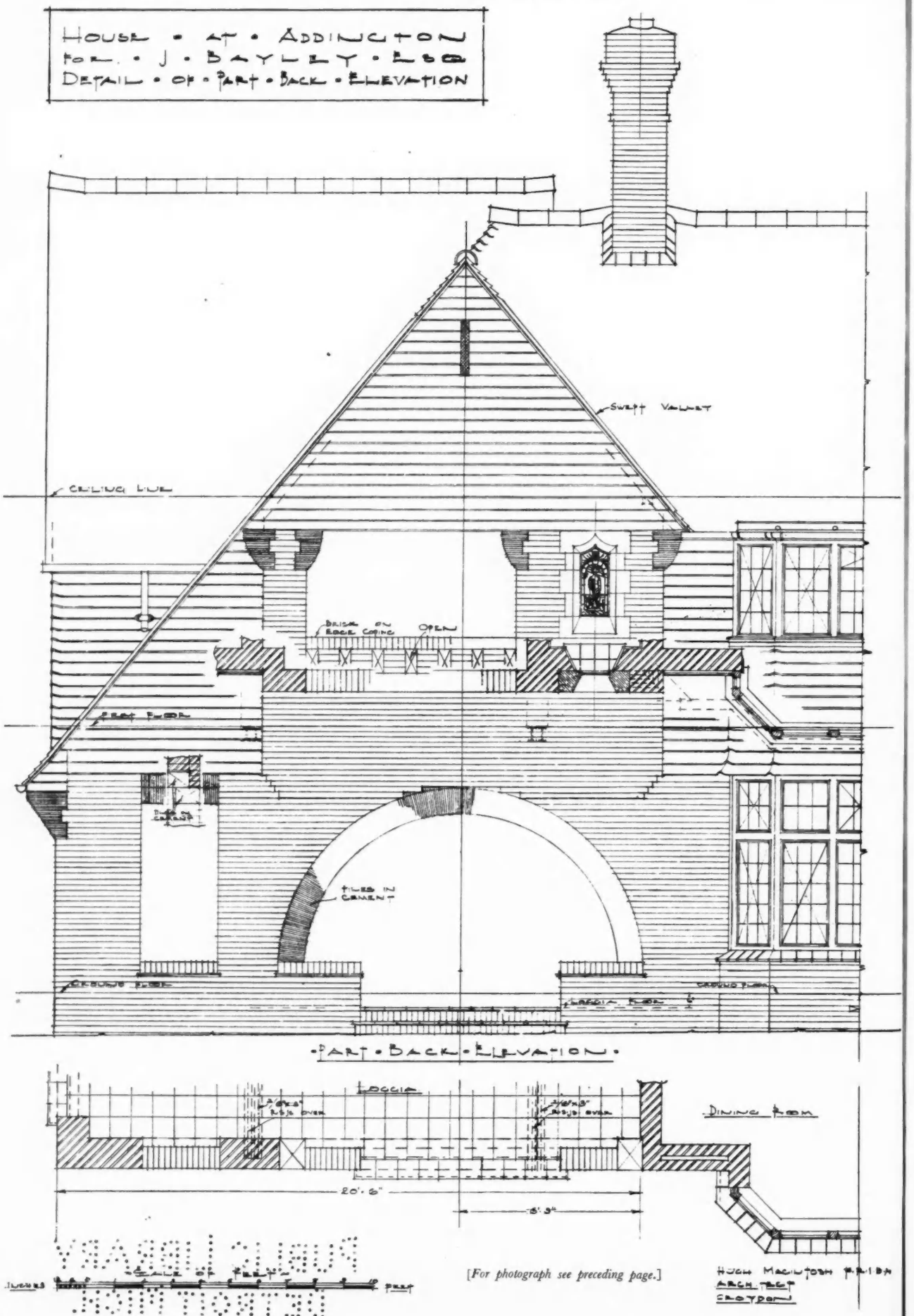
By

HUGH MACINTOSH

OCCUPYING the south-easterly corner of the house of which other illustrations and plans are reproduced on pages 546–7 of this issue, this feature forms a part of the elevation facing towards the wooded garden.

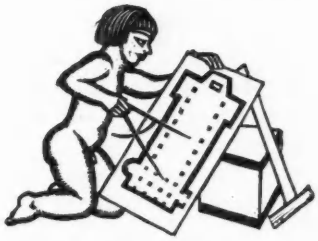
Access to the loggia is from the dining and drawing rooms, while the first-floor balcony opens out from a playroom, and is intended to be used for open-air sleeping. Adjacent to it, on the right, is seen the window, glazed with stained glass to the architect's design, of a private oratory, entered from the best bedroom, adjoining.

The materials are 2 in. facing bricks for the walls, tiles in cement for the arch, and stone for the oratory window. The building is tiled, and metal casements are used. For detail drawing, see overleaf.



[For photograph see preceding page.]

THE ARCHITECTS' JOURNAL



WEDNESDAY, APRIL 2, 1930

THE BRIDGE OF OUR DESIRES

"The London County Council are prepared to give an undertaking that designs for the bridge would be obtained by competition or otherwise."

—SIR PERCY SIMMONS, BEFORE THE CHARING CROSS BRIDGE BILL PARLIAMENTARY COMMITTEE.

IF there is anything from amid the disheartening struggle for an ideal Charing Cross Bridge which we may regard as some reward for the hard blows we have suffered and the insults we have had to swallow, it is the grudging assurance, given in cross-examination by Sir Percy Simmons, that the L.C.C. are "prepared to give an undertaking that designs for the bridge would be obtained by competition in fulfilment of the instruction given by Parliament to the Committee."

It has been the policy of this JOURNAL to press for an open competition for the bridge as perhaps the one form of recognition of the existence of a body of interested architects which it would be permissible under the circumstances to make. This assurance by the L.C.C. is therefore not only something to clutch at, but a definite step in the reinstatement of architects as responsible persons.

The history of the Charing Cross Bridge scheme is marked by the extraordinary attention given to it by architects and town planners over a very considerable number of years, and by the nearly complete disregard of this body of highly interested and very well-informed opinion by those into whose hands has since fallen the work of evolving a workable scheme. It is quite naturally recognized that the evolution of these later stages involved much negotiation with large financial interests, and that the mere laying down of routes is but a part, even if a very important part, of what must be done before a bridge becomes possible.

Yet upon our shoulders is to fall the burden of expressing in architecture the meaning of the great thing which this generation is about to undertake, and just as it would never be expected of us to make a town hall out of a disused cinema, so we should find it difficult to design a bridge and its approaches commensurate with the fine things that everyone is prepared to say of Charing Cross Bridge when all this fighting is over, out of the tangled wreckage left to us by the secretive committee-work of the L.C.C., the Ministry of Transport, and the Southern Railway.

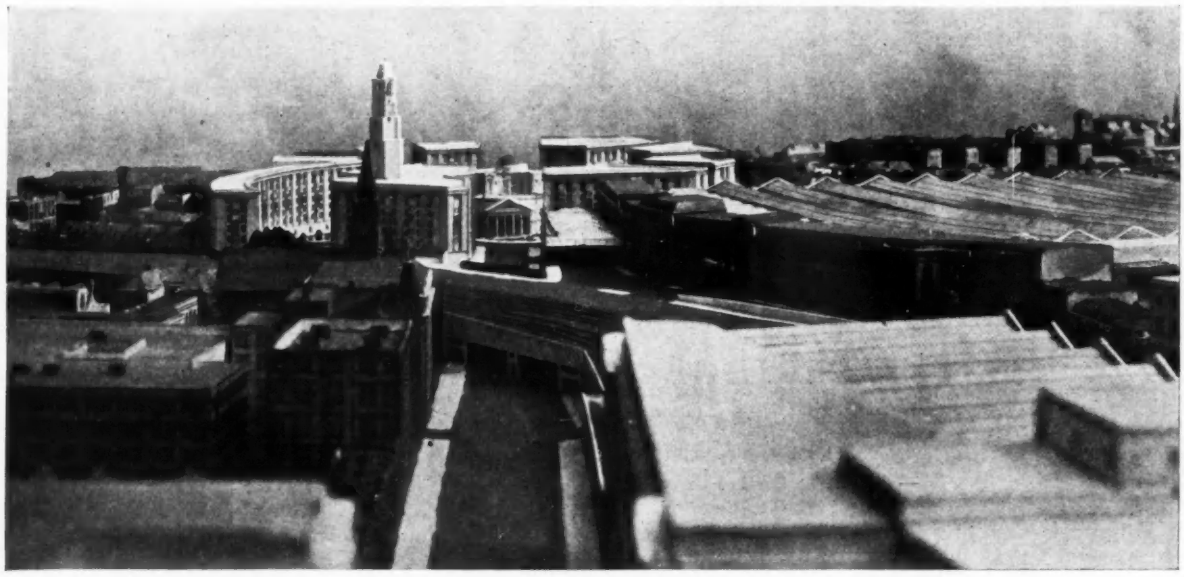
It seems to us that the scheme before Parliament is the result of three forces working in disunion. First is the Southern Railway fighting for its money and a new station; second, the Ministry of Transport, fighting for the fulfilment of traffic requirements, and making traffic an inhuman and ridiculous monster to be satisfied at whatever cost to amenity and sound civic development; and, third, a very personal architecture dressing this thing of the twentieth century in grandiose eighteenth-century trimmings. It is no wonder that the scheme is a compromise for everything but the railway; and even there it will be proved that, by comparison with better and clearer schemes that seek to use the south bank for *real* development by means of a bridge serving all purposes, the station which this scheme gives will be still a compromise.

And the tunnels are a compromise, the embankments, the twisted and severed joint of the bridge as it sways uncertainly towards the Strand, and the lateral approach roads; all these are compromises. The magnificent architecture of the station and the buildings that flank it, these which, let us be very clear about it, are *not* included in the sum allotted, are shams made for the edification of Parliament.

The promise of a public competition for the bridge is therefore small comfort at the moment. Take away the buildings, and we are left with tunnels and wandering viaducts, bewildering circuses and unremunerative dead ends—poor groundwork for a bridge to express the grandeur of an Empire capital.

If, therefore, we are to be given something better to work at when the competition is announced, now is the time, while the scheme is in committee, and before it reaches Parliament again, to bring forward the views of architects as they bear upon the larger questions of design.

The R.I.B.A. was very active in this work when the negotiations began, but whether by reason of the mistakes it committed, or because of its very disunited attack upon the forces opposed to it, or because it has never at any time sponsored ONE particular scheme, its fire seems to have diminished exactly at the time when it is most needed, and it is left to Westminster and to Lambeth to make official opposition. This is a pity, because everything that is said and done today will affect the final scheme; and it is not too late to hope that Parliament may be induced to agree with the mass of critical opinion and throw out this present bridge, to mould one nearer to our hearts' desire.



THE DOG-LEG IN LAMBETH:

AS REVEALED BY THE MODEL



HOW the proposals of the Charing Cross Bridge Bill would affect the area immediately concerned in South London is revealed with damning candour by the model prepared for the use of the Committee now sitting.

These two photographs show, in perspective, and in plan, the desperate imbroglio of dismal tunnels and streets aslant that would confront a traveller faring southwards across Waterloo Bridge. In the upper, the roofs of the new south-side Charing Cross Station are on the right, with the present Waterloo Station beyond. Between, on a vast diagonal viaduct, are to run not only railway lines but the approach road from the new Charing Cross Bridge, that is only to decline to earth on traversing the dog-leg and reaching the circus, in the midst of which, closing the vista down Waterloo Bridge Road, is seen the pediment of the "New" Vic. The tower on the left is that of Toc H.

What is to happen to York Road, which crosses both bridge approach roads—and many subsidiary streets —is best seen on reference to the plan. The whole of York Road from Waterloo Bridge Road to the farther side of the new approach road from Charing Cross Bridge, part of the first span of which is seen in the bottom right-hand corner, is to disappear under another tunnel.

Foot passengers on the high-level road are to traverse what has been termed a positive Clovelly of stairs to reach Waterloo Station or Belvedere Road or a dozen other objectives.

The L.C.C. have disclaimed responsibility for laying out the south side embankment which figures in the model.



E. A. Stone, architect of the Prince Edward Theatre, Old Compton Street, Soho, illustrations and plans of which are reproduced in this issue. He has an extensive practice in the cinema world and has designed many of the "Astoria" picture theatres, two of which have recently been the subject of articles in this JOURNAL.

NEWS & TOPICS

E. Vincent Harris, whose extension to the Surrey County Hall is also illustrated, was born in 1879, and has been pre-eminently successful in competitions, among them that for the Reference Library and Town Hall extension at Manchester. His design for Board of Trade offices, though accepted, has never been built.



FULSOME OPTIMISM

CAPTAIN SWINTON, in a letter to *The Times* of March 27, gives rein to such a burst of optimistic panegyric upon the model of Charing Cross Bridge as might well cause the authors of the scheme to look closely again to see if it be really the thing so praised. "On the south side," he says, "we are to have a concentration of rail services *above* and below ground, where everything from South England and the Continent . . . can be scientifically brought together, catered for, and distributed."

*

I shall know I am scientifically catered for when I walk sadly through beetling tunnels, or pass by the side of railway sidings, blinking an eye, until the *architecture* commences again where the engineer has first had his say.

*

If this model is enough to evoke such enthusiasm from Captain Swinton, what chance have the opposers to the bridge without a counter-model?

DINNER TO ROBERT ATKINSON

The announcement that Robert Atkinson is to be "dined" on April 10 will be received with pleasure by the whole of the profession. The compliment marks the termination of seventeen years of close and successful contact with the Architectural Association School, and will render honour, where honour is due, to a great architect and an inspiring leader. He was appointed Master in Design at the A.A. in 1912 and promoted to the post of Headmaster in 1913. In 1920, when the needs of his own practice became too insistent, he handed over the reins to Howard Robertson and was elevated to the post of Director of Education, resigning that appointment last year.

*

During his term of office and under his firm and enthusiastic leadership, he has had the satisfaction of seeing the school blossom like a bay-tree, and now leaves it possessed of a definite tradition and clear policy, firmly planted in the affections of English architects as one of the great teaching institutions of the country. That this happy state of affairs is largely the result of his own efforts all those who have had the privilege of working with him will be only too glad to allow. A strong personality, he was able to inspire others with something of his own enthusiasm. While anything but a pedant, he is a scholar who owns quite the best privately owned architectural library in England, and can discourse upon authors, editions, illustrations and bindings with the same fluency and authority that he can bring to bear upon a piece of antique furniture, a blue-and-white drug pot, or an architectural drawing. His criticisms in the school were always listened to with the greatest respect and interest. A master of witty, vivid and often pungent phrase, he left the student in no possible doubt as to his shortcomings, while his praise was treasured.

POWERS TO RE-PLAN OUR CITIES NEEDED

The English delegates who attended the Twelfth International Housing and Town Planning Congress at Rome were impressed by the powers which are vested in Continental town planners. Not only in Italy but in Germany the town and regional planner can control the development of whole districts so that new streets, so great a burden to our own towns, can be made to pay for themselves out of the rise in value of surrounding land already bought by the town for the purpose of realizing the benefits of the new values their work creates. The great drawback in this country is the restriction of town planning to undeveloped areas. Until Parliament passes a new Act to widen the scope of town planning, so that it may really deal with the *insides* of large cities, we are at great disadvantage with our neighbours, and cannot hope to tackle our problems where they are worst.

KEEPING AN EYE ON HULL'S NEW STREETS

Hull has probably done the right thing in retaining the services of Sir Reginald Blomfield, R.A., to keep an eye on the progress of building the new street frontages that formed the subject of a recent competition. It seems that the Corporation, having instituted the competition and accepted winning drawings, are either not in a position to maintain the complete design in detail, or regard it as guiding rather than binding them. They are seeking powers that will enable them to erect buildings themselves, and in the meantime Sir Reginald is to see that the demands of shopkeepers and other occupants for this thing and that are not allowed to spoil a really fine design.

THE UTILITY OF EMPIRE TIMBERS

In a recent letter to *The Times* Lord Passfield, the Secretary of State for the Dominions and Colonies, asks readers for additional records of home-grown timbers that can be used structurally and decoratively. Some of the fine old woods such as oak and walnut have, of course, been in use for centuries in public and domestic work. But there are other lesser-known woods, of which home-grown beech, ash, Scots pine, larch, poplar, sycamore, sweet chestnut, spruce and elm may be mentioned.

★

Further records are necessary before the more general use of these lesser-known timbers can be advocated and the woods themselves marketed, and any notable examples of their use for structural or decorative purposes would be welcomed by the Empire Marketing Board.

HAMPSHIRE AND THE ISLE OF WIGHT ARCHITECTS' YEAR BOOK

Of the provincial architectural associations affiliated to the R.I.B.A., none has made greater progress during recent years than has that of Hampshire and the Isle of Wight. I have received a copy of this "Association's" *Diary and Year Book*, which is indeed a model of its kind. Its contents include not only a frontispiece portrait of their president, a well-arranged and "tabbed" diary, with memoranda pages giving times for early closing in the principal towns of the area, dates of meetings, lectures and excursions and the days of the week by which plans must be submitted for the consideration of the city engineers. Room has also been found for reports of lectures and annual exhibitions, a list of architectural books recommended to students, and the questions set in the R.I.B.A. examinations during the current year.

★

Other useful sections are devoted to the Department of Industrial and Scientific Research, regulations concerning architectural competitions and to the activities of the Hampshire and Isle of Wight Architects and Builders' Consultation Board. It is difficult to conceive of a more useful diary, and the editor, A. L. Roberts, who was appointed Honorary Secretary to the Association in 1925, is to be heartily congratulated. Since his period of office the membership figures have increased from 73 to 237. The *Diary and Year Book* is posted to members free of charge, and the advertisement revenue is sufficient to ensure that no expenses are incurred to the Association in its production.

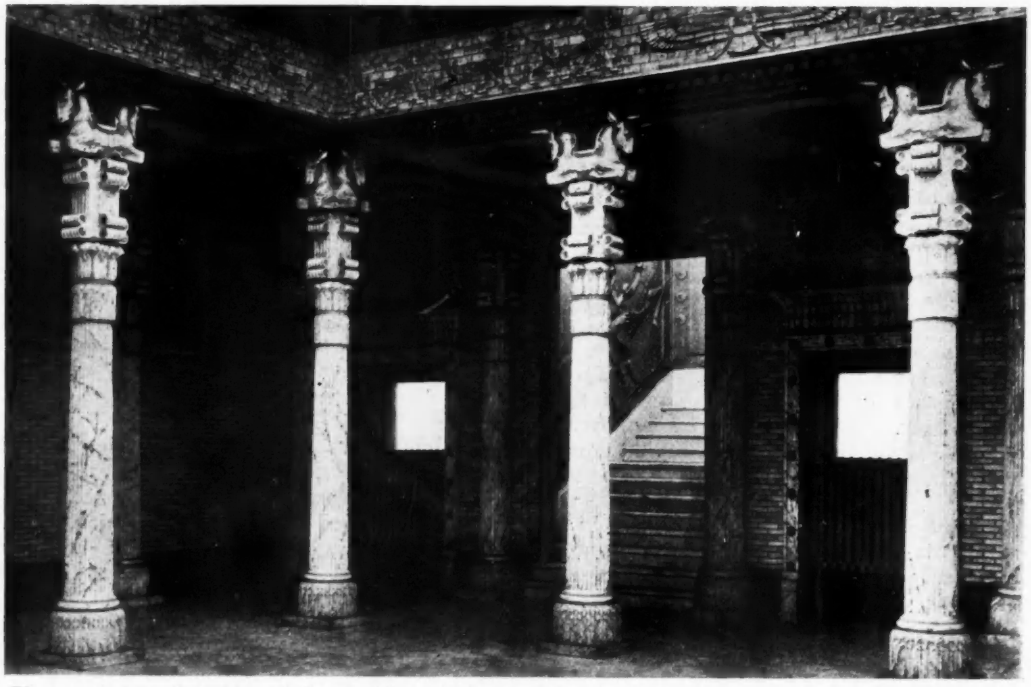
HALL OF DARIUS IN LONDON

There are some very unusual and not a few peculiar interiors hidden away behind the uniform London façade. The threatened destruction of 47 Brook Street discloses a hall which is a replica, in the materials of interior decoration, of the "Hall of a Hundred Columns" at Persepolis, attributed to Darius and built in the fifth century B.C. The most essential feature of the hall is the columns, the slender shafts of which widen into a bell-like curve of inverted leaves, while at their heads a rather Egyptian-looking palm-leaf capital is surprisingly carried up into a four-sided abacus with rows of volutes. Each of these in its turn supports the roof on the heads and shoulders of conventional bulls placed back to back.

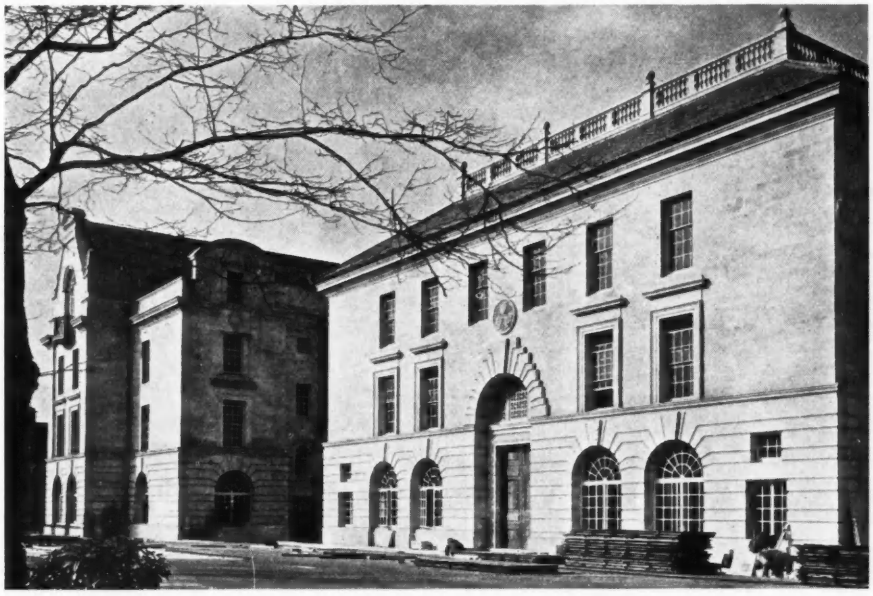
★

The marble of the original columns is carried out here in scagliola, and their multicoloured glazed bricks in similar bricks with the coloured "Archer" procession above them. The hall has a definite interest in view of the forthcoming exhibition of Persian art, though it is doubtful whether its interest is sufficiently vital, in the form in which it exists, to make it worthy of preservation.

ASTRAGAL



The reproduction of the Hall of Darius, King of Persia, erected in the London home of Sir John Bland-Sutton in 1905. The house being threatened with demolition, this hall is for disposal.



The main, east, front of the new extension, to be opened by H.R.H. the Duke of Gloucester on Monday next, April 7. In the foreground is seen the building material for the construction of a huge marquee to be used in connection with the opening ceremony. A general view showing the skilful manner in which the new extension has been linked up with the old building, with its clock Tower, appears *on page 531*

SURREY COUNTY HALL: NEW EXTENSION

DESIGNED BY E. VINCENT HARRIS

ON Monday next H.R.H. the Duke of Gloucester will open the new extension to the Surrey County Hall, Kingston-on-Thames. The extension provides a block with a frontage 200 ft. long to Penrhyn Road, and a wing block 160 ft. deep running towards Milner Road. At present the work of the County Council is done in small houses in the vicinity of the main hall, and the new extension will make it possible to house the whole of the staff under one roof.

Externally, the building, a reinforced concrete structure, is faced with Portland stone, and the roof is covered with green slates, graduated in colour and size. Windows are of wood, and the balconettes have ornamental iron balustrades and Portland stone floors. The main problem confronting the architect in designing the exterior was to provide a new building which would link up with the old and form a complete architectural whole, without detracting from the importance of the old hall.

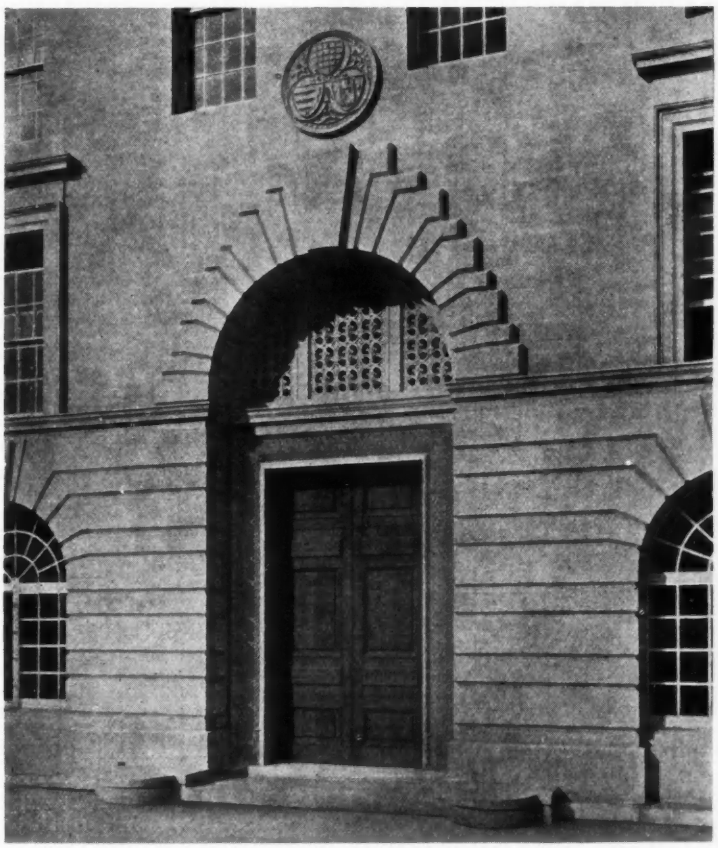
Among the rooms of outstanding interest are the chairman's room, the committee room, and the members' lounge and dining-room.

The chairman's room has panelled walls in quartered figured English walnut, the doorway and cornice being carved in leaf design.

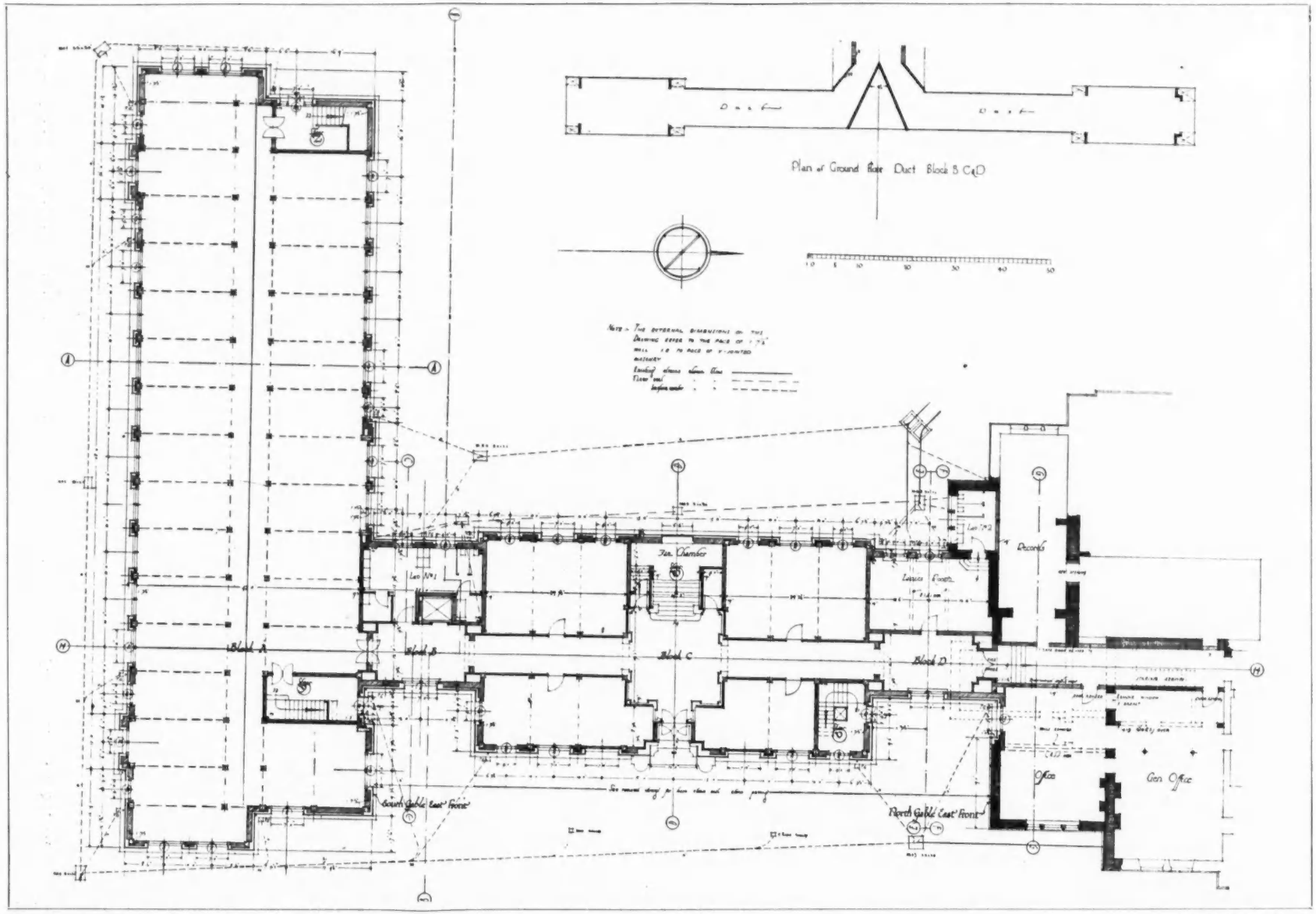
The members' lounge is panelled in Australian bean wood, and the pilasters are surmounted by shields on which are painted the coats of arms of the boroughs as well as the badges of the Surrey Yeomanry, the East Surrey Regiment and the Queen's Royal West Surrey Regiment.

The decoration of the committee room and the dining hall is described beneath the illustrations on pages 532 and 533.

Dining room accommodation, with the necessary kitchen arrangements, has also been provided for the staff.



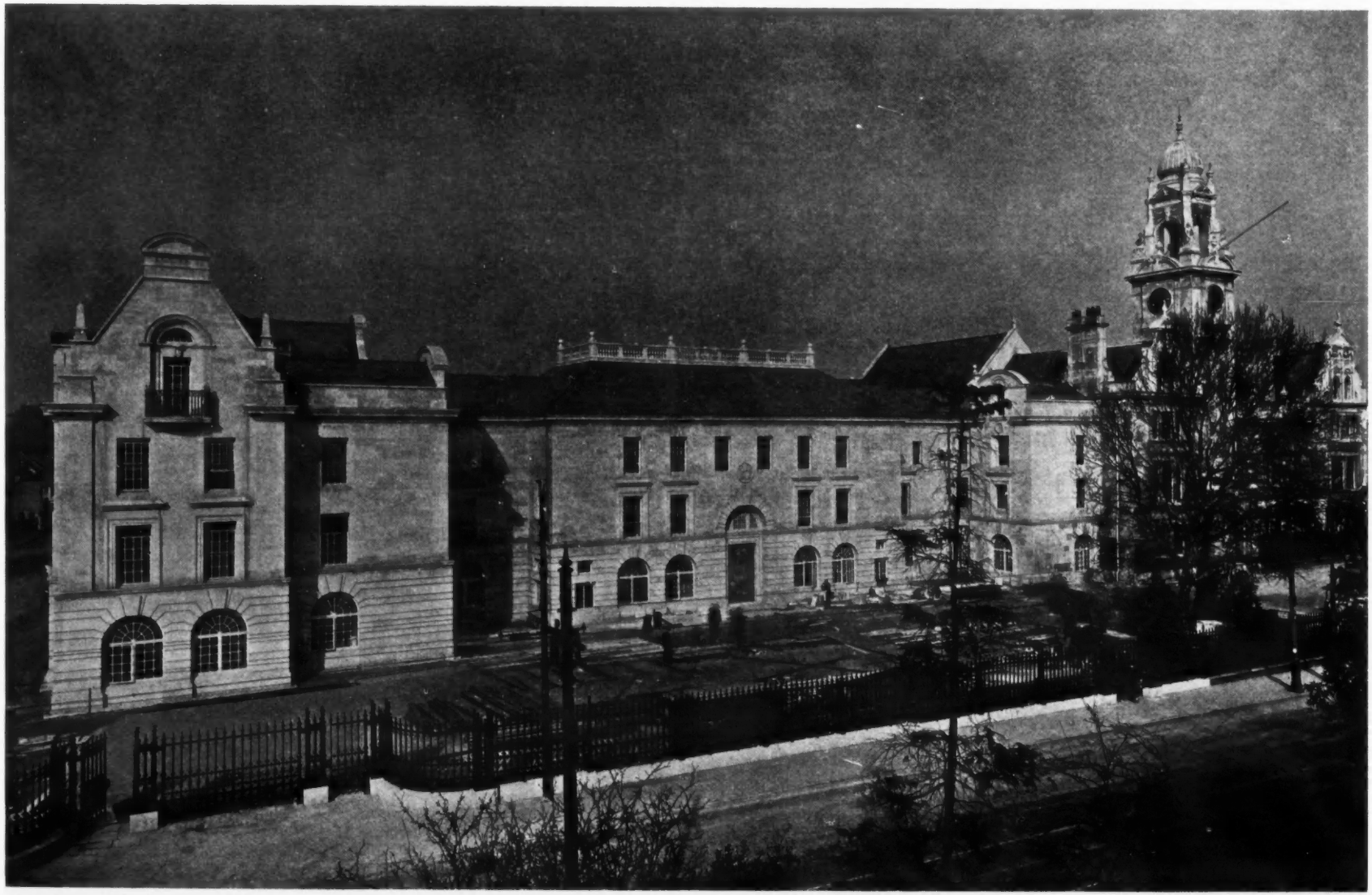
The main entrance of the new extension is in Portland stone, and has oak doors. The stone medallion above the lattice fanlight bears the seal of the Surrey County Council and the coats-of-arms of Kingston and Guildford.



Surrey County Hall : New Extension.] *[By E. Vincent Harris.*

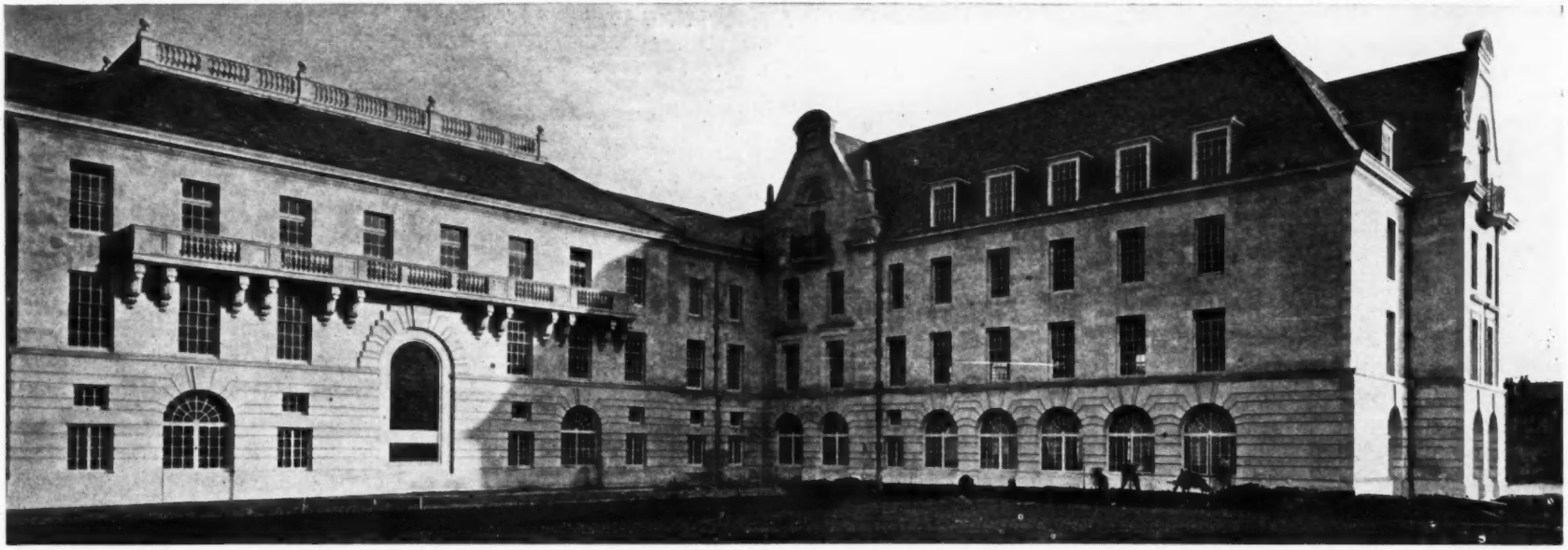
The ground floor plan. Approximately 50,000 square feet of extra office accommodation has been provided. The aim of the architect has been to allocate to the various departments of the council a large floor area sufficient for their individual needs. Division partitions are used only to secure a certain amount of privacy for the heads of departments. This arrangement makes for easy supervision, as each floor area has two aspects.

arrangement makes for easy supervision, as each floor area has two aspects.



Surrey County Hall : New Extension.] [*By E. Vincent Harris.*

A general view of the main, Penrhyn Road, front. The old portion of the building is surmounted by the clock tower. The extension was necessary to house the staff of the county council under one roof. At present the work is done in small houses in the vicinity of the main hall, causing great difficulties in the administration and handling of the ever-increasing legislative work which is being delegated to county authorities by the Government.



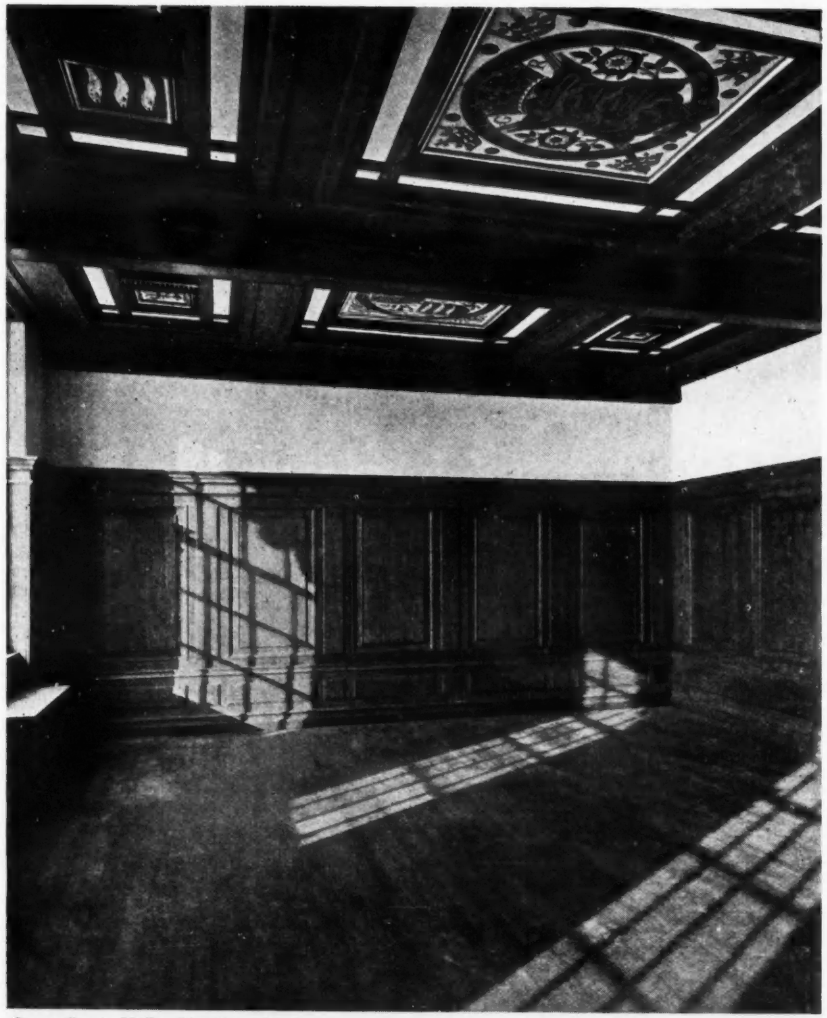
On the west front of the extension, in front of the windows of the general conference room and the members' dining-room, is a carved stone balcony, with turned columns and carved trusses. The stained-glass window beneath it lights the staircase, and is a gift of Mr. H. E. Smith, a county councillor.

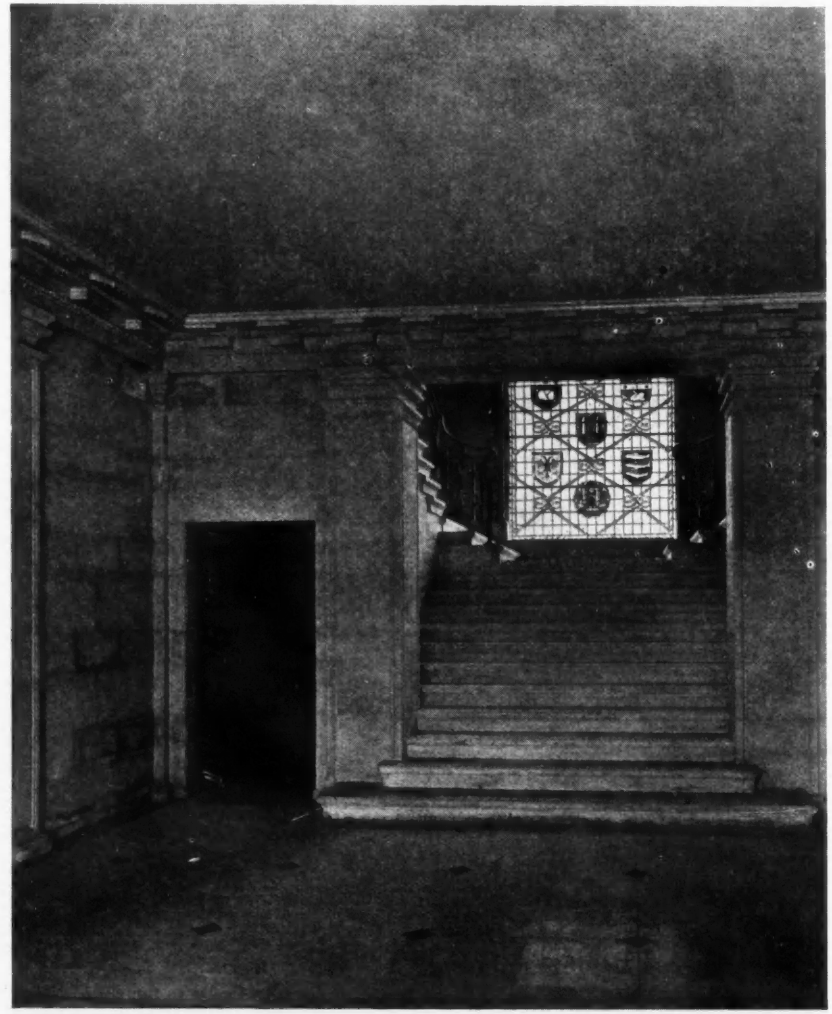




A view from the south-west ; and the members' dining-room. In the grounds are five tennis-courts, a large flower-bed, a bowling-green and a garage shelter nearly two hundred

A view from the south-west ; and the members' dining-room. In the grounds are five tennis-courts, a large flower-bed, a bowling-green and a garage shelter nearly two hundred feet long. The members' dining-room is panelled in weathered oak.





Surrey County Hall : New Extension.] [*By E. Vincent Harris.*

The committee room ; and the entrance hall. The former is panelled in English oak. On the ceiling, also in oak, are three large centre panels painted with the Royal Arms and the coats-of-arms of the diocese of Guildford and the county of Surrey. Smaller panels bear the arms of six county boroughs : Kingston, Guildford, Richmond, Reigate, Godalming and Wimbledon. The entrance hall and staircase are in Portland stone, and the floor is of artificial marble. The balustrade is of wrought iron; the handrail of bronze.

PRINCE EDWARD THEATRE, OLD COMPTON ST., W.C.

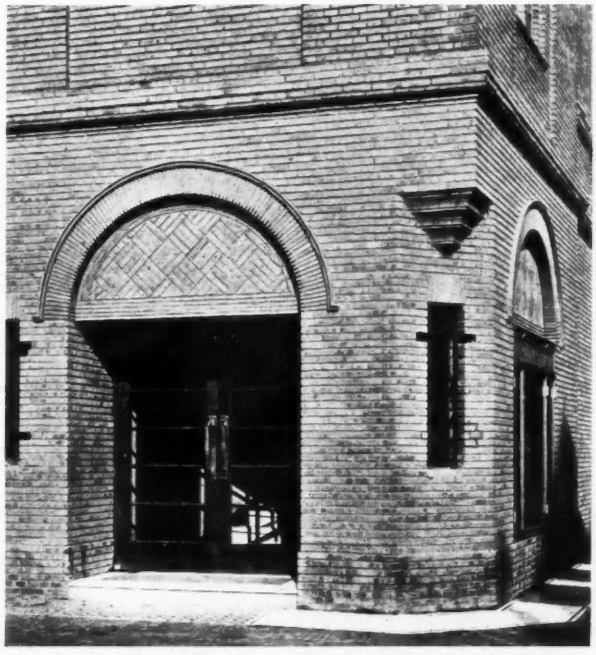
[*By E. A. Stone*]



The proscenium and Royal box of the Prince Edward Theatre, which opens tomorrow. The proscenium arch is formed of a series of glass coves tinted in amber to match the lights of the circle front. The main colouring-scheme of the auditorium is a reddish purple, known as "fuschia" and gold, while the hangings and carpets are in various tones of red. The Royal box is entered direct from Greek Street, through a foyer.

PRINCE EDWARD THEATRE, OLD COMPTON ST., SOHO

DESIGNED BY E. A. STONE



A detail of the brickwork, small mauve bricks with raked joints, at the corner of Old Compton Street and Greek Street.

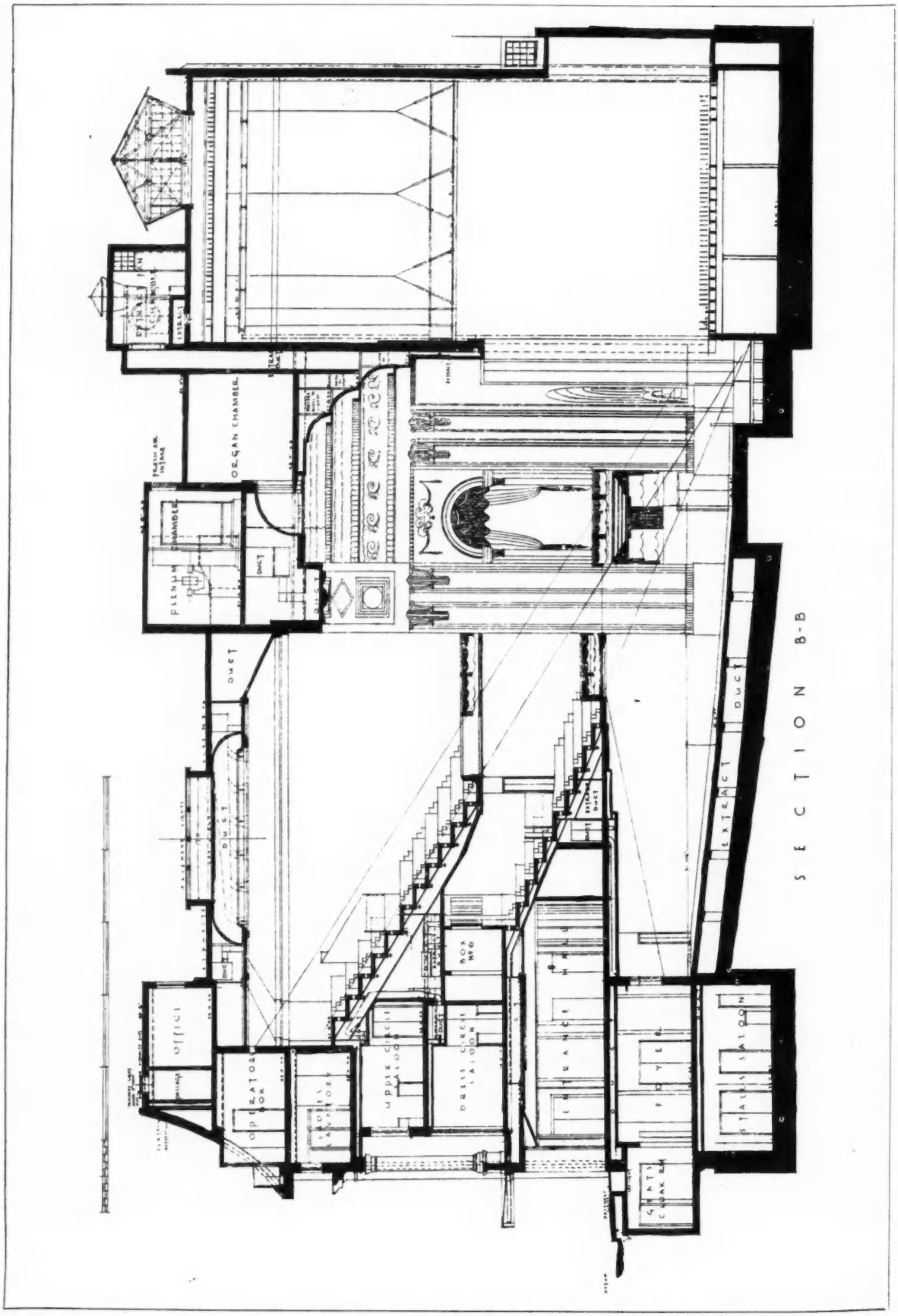
TOMORROW, April 3, London's latest theatre opens with a big musical production. The theatre is situated at the corner of Greek Street and Old Compton Street, in the very heart of Theatreland. The ground on which it is built was formerly occupied for nearly a century by Messrs. William Reddan and Son's premises known as "The Emporium." This building formed a link with Georgian days, when Old Compton Street was one of the most fashionable shopping thoroughfares in London. With its low ceilings and quaint interior, the shop always had a fascination for lovers of old London and foreign visitors, and was patronized regularly by members of the Royal Family.

An inspection of the accompanying plans and section of the new theatre shows that there is no seat in the house but has a perfect view of the stage. Corridors and staircases appear in duplicate, and the foyers and buffets at all levels are of ample size, so that there should be no cause for complaints regarding accessibility and service.

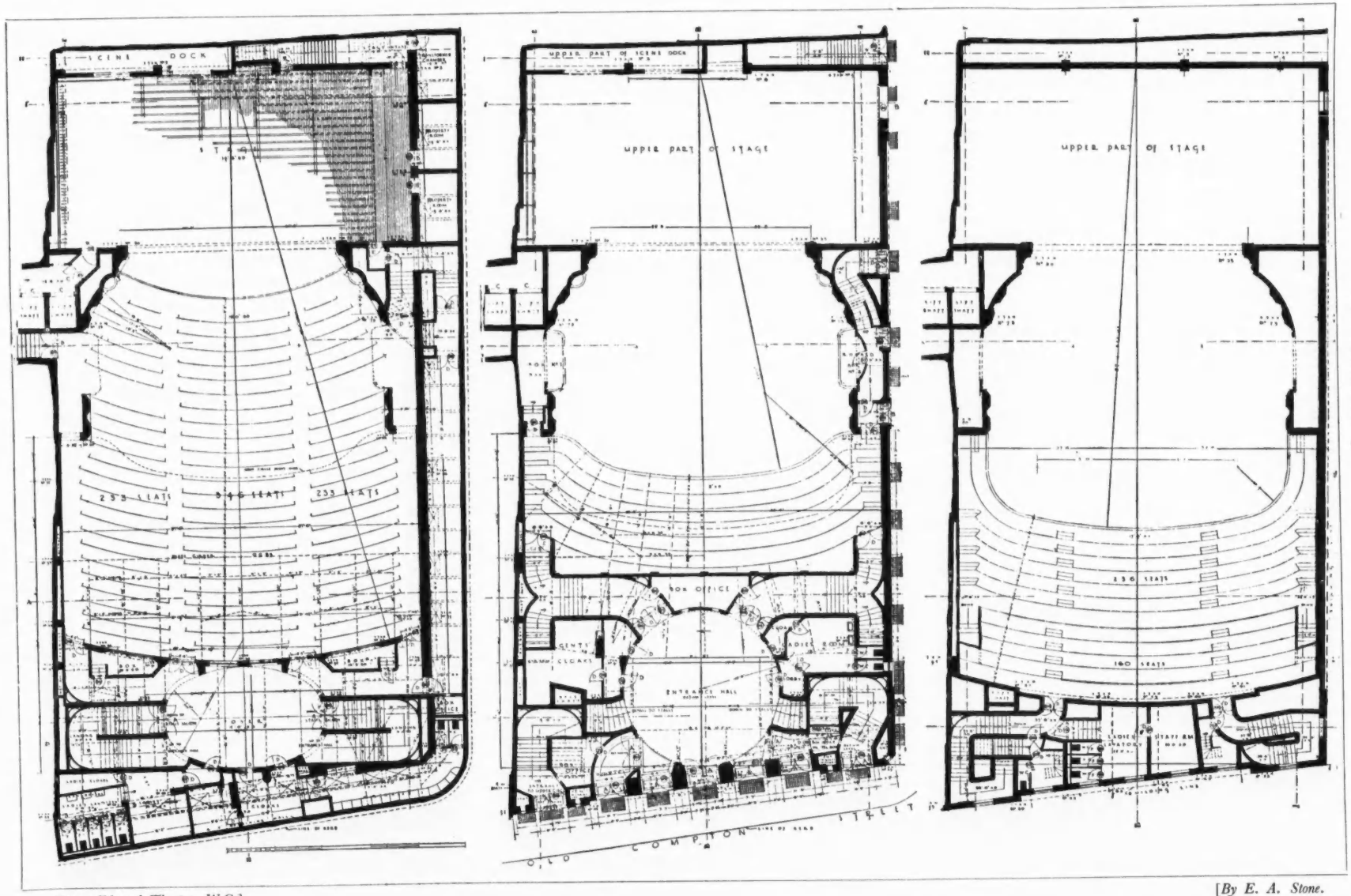
The theatre accommodates approximately 1,650 people, divided as follows: Stalls and pit stalls, 850; dress circle, 322; upper circle, 396; boxes, 82. The upper circle is divided into two sections at



A general view, taken from approximately the same viewpoint as the abov detail. The brick façades harmonize with the surrounding buildings and are enlivened by the introduction of bright green windows and shutters. At night the theatre is flood-lit from the canopy and cornice.



Longitudinal section. For the artistes there are nearly forty large dressing-rooms, and all the "stars" have their own sitting-rooms. Two large lifts are installed, adjacent to the stage, to take the artistes to the various levels. The stage entrance and exit is in Frith Street.



Prince Edward Theatre, W.C.] [*By E. A. Stone.*

Plans at stalls, entrance hall, and upper circle levels. The theatre is designed for the production of musical plays and revues, and accommodates approximately 1,650 persons. It has a stage second in size only to those of Drury Lane and Covent Garden, which are the largest in London.



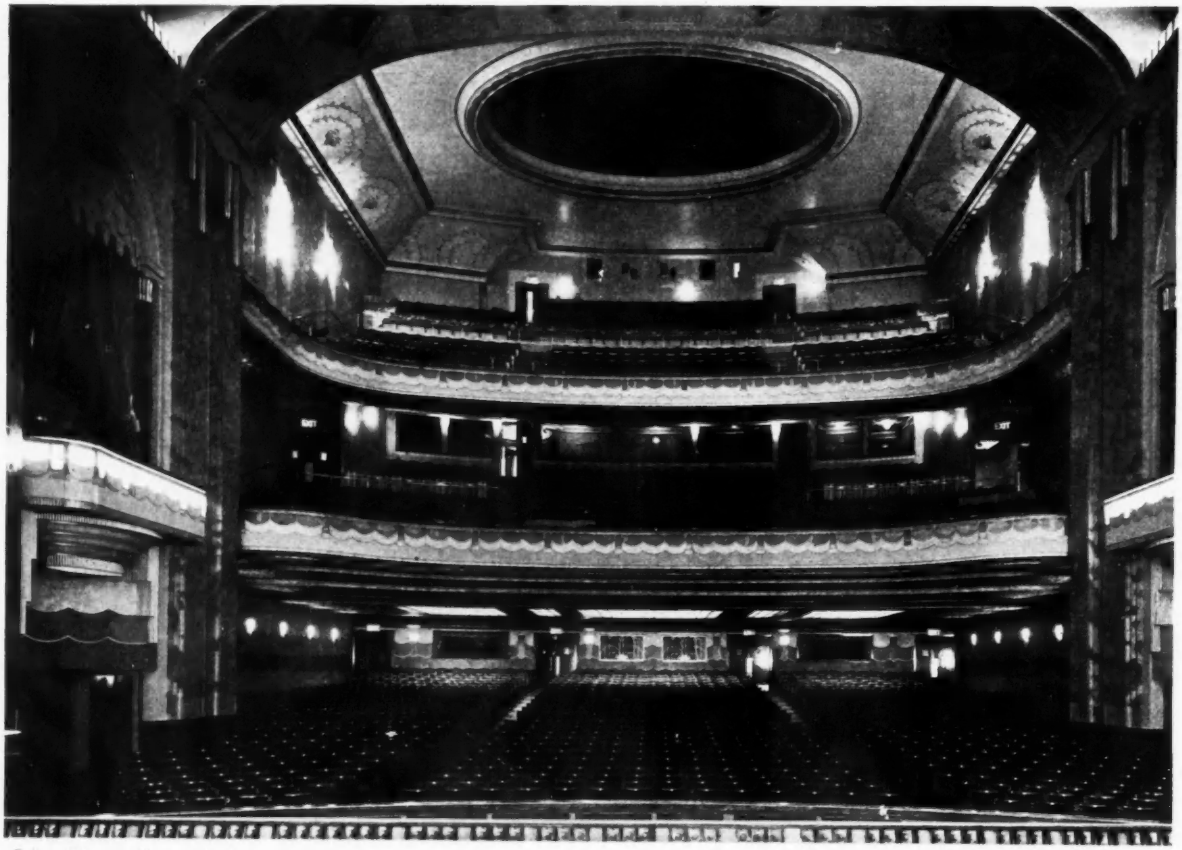
Patrons enter from Old Compton Street into a circular entrance hall, lined in walnut. There are foyers above and below for the dress circle and stalls respectively.

different levels with separate approaches, and the back portion of this circle, therefore, takes the place of gallery.

Full consideration has been given to the democratic spirit of the times by the arrangements thus made in the planning of the upper circle and gallery. The comfort and finishings are equal to those of the stalls and dress circle.

A novel feature is the planning of the boxes, the greater number of which are placed at the back of the dress circle with a view unsurpassed in the house. A similar remark applies to the Royal box, and to the box opposite.

The stage has been built on the latest principles, and the best features of American and Continental stages have been adopted. A special feature is the electrical switchboard, which is constructed to allow all the lighting for eight scenes to be pre-set, requiring only the movement of one switch to light each entire scene. An operator's box is provided in order that the theatre may also be used for trade shows in connection with the "talkies" and silent pictures.



Prince Edward Theatre, W.C.] [*By E. A. Stone.*

The auditorium, looking from the stage. Every seat is a cosy armchair with ample leg-room and giving a perfect view of the stage. The upper circle is in two sections, provided with separate approaches, the rear portion taking the place of the old-time gallery.



ENGLISH PRECEDENT No. 109

WESTERN SCREEN, CHAPEL OF TRINITY COLLEGE, OXFORD

Trinity College Chapel, Oxford, a building commenced in 1691, incorporates some decorative woodwork of exceptional interest and beauty, consisting of an altar-piece and other fittings at the east end, the wainscoting of the side walls, and a screen at the west end dividing the chapel from the ante-chapel, together with canopied seats and rows of benches. The wainscoting generally is of oak, the expanses of plain surface in the altar-piece and screen being veneered with walnut-wood, cross-banded and inlaid with a parquetry design, the applied wood-carving being of limewood, while the pierced panels flanking a central opening in the screen are variously described as of cedar or of "a sweete outlandish wood not much differing from Cedar but of a finer Graine."

The east and west ends of the chapel exhibit a general correspondence in the design of the woodwork. In the screen at the west end the centre is occupied by an opening, flanked by detached columns of the Corinthian order supporting a segmental pediment, bearing reclining figures of the four Evangelists and a central vase, below which, fronting the tympanum, is a richly-carved inclined cartouche. On either side of the central opening is a niched and canopied seat, surmounted by a flammate vase and flanked by a large panel of elaborately carved and perforate scroll-work, bearing, on the ante-chapel side, amorino-heads, etc., in high relief, and, on the chapel side—that shown in the photograph—a central bunch of fruit, flowers, wheat-ears and hops, the whole panel being enframed within a bold bolection-moulding and encompassed by rich applied carving representing an open book festooned with swags and drops of tasselled drapery.

It is not known whether Wren was responsible for the design of this sumptuous woodwork, or what share is attributable to that prince of craftsmen, Grinling Gibbons, the only name actually to be identified with the work being that of Arthur Frogley, the Oxford joiner, though records are extant of payments for bringing carvings from London. —[I. C. GOODISON.]

CHARING CROSS BRIDGE BILL: COMMITTEE'S PROCEEDINGS

BY OUR SPECIAL REPRESENTATIVE

THE Private Bills Committee of the House of Commons on the London County Council (Charing Cross Bridge) Bill, under the chairmanship of Sir Henry Cautley, began their proceedings last week by examining Sir Percy Simmons, chairman of the Improvements Committee of the London County Council. He said the present proposal had originated more immediately from the circumstances attending Waterloo Bridge. The Royal Commission recommended that Waterloo Bridge should be reconstructed with four, and not six, lines of traffic, the corollary being that there should be a bridge constructed at Charing Cross.

The Chairman: And also a bridge at St. Paul's?

Sir Percy Simmons: I do not think they ever considered that St. Paul's was interlocked with Charing Cross Bridge.

In reply to further questions, Sir Percy said that the Government offered a grant of 75 per cent. from the Road Fund of the approved cost of reconstructing Waterloo Bridge, and accepted the position that its preservation involved the construction of a road bridge at Charing Cross.

The Chairman: What business had the Minister of Transport in this at all, except that he was providing the money?

Sir Percy Simmons: He must see that there are proper facilities for transport, and a bridge would come under his authority. For ordinary street widenings the Government contribute 50 per cent. of the cost from the Road Fund, and on a big scheme more.

In reply to further questions, Sir Percy Simmons said that the Southern Railway regarded the first proposal for transferring Charing Cross station to the south side of the river as impossible. They did not want to adopt the Lion Brewery site scheme, and only did so as a result of pressure from the Government. They were now satisfied that everything would be done under this scheme to meet the convenience of their passengers. The Underground Railway and omnibus facilities for getting from the new station to other parts of London would be even better than those provided at the present terminus.

Questioned as to the objections of Westminster City Council to the Bill, witness said that they were asking for an undertaking that the L.C.C. should forthwith get compulsory powers to widen St. Martin's Lane. They would not admit that it was necessary with the present amount of traffic, but only that it would be necessary when the new bridge was completed.

In reply to Mr. Charteris, K.C., for the promoters, witness agreed that while the traffic towards St. Martin's Lane would be increased by the bridge, there must be set off against that the construction of the circus at the entrance to St. Martin's Lane, which would immensely increase the fluidity of the traffic.

Witness said that the L.C.C. were prepared to give an undertaking that designs for the bridge would be obtained by competition or otherwise.

In reply to further questions, he said that the L.C.C. were giving the railway about two-and-a-half times as much space as they had now, and were paying them £2,126,000. That sum did not include the cost of purchase of the site on which the new station was to be erected.

Counsel: The Southern Railway did not make a bad bargain?

Sir Percy Simmons: I can say without hesitation that the Southern Railway made a fair bargain and that the L.C.C. made an exceedingly satisfactory bargain.

Counsel: And it results in allotting to the Southern Railway a site for a station that might become one of the finest sites in the Empire?—No; we are getting what is already one of the finest sites in the Empire.

Witness agreed that under the present scheme about 100 yards of York Road would be covered in. He could not agree that earlier schemes in which a covered way over the Strand was a central feature had been rejected mainly because of that feature. They were rejected because the present scheme was better.

The L.C.C., witness agreed, would not provide the buildings and embankment gardens that were shown in the model on each side of the bridge on the Surrey side.

Counsel: So that what Lambeth can look forward to is not a charming site like that in the model, but a hole in the ground, probably 28 ft. deep, rather like a quarry?—I am advised that there will be no difficulty in disposing of this site.

Mr. Frederick Palmer, consulting engineer, who acted jointly with Sir George Humphreys as engineer to the Charing Cross Bridge project, was then called.

In reply to Mr. Charteris he said that the scheme now being discussed would reduce the existing amount of viaduct by 2,000 ft. An important consideration in determining the site of the new bridge had been the question of navigation.

He regarded the embankment on the south side of the river as a desirable feature which would add considerably to the amenities of the Lambeth area. An area of eight-and-a-half acres would be covered by the new station on the Lion Brewery site, with the main entrance about 200 ft. back from the river embankment. This latter area represented roughly what would be reclaimed from the river. They had got the railway level down as far as possible consistent with the required head-room for the bridges.

Replying to further questions, witness said that the London County Council had satisfied themselves that there need be nothing unsightly in connection with the covered way over Waterloo Road. It would be made into an arcade with shops. The bridge over York Road would be 360 ft. long. The land between Belvedere Road and York Road already belonged to the L.C.C. It would probably be used as an approach to the new station.

The Chairman: What will be the end of Belvedere Road?

Mr. Palmer: It will really become an approach to the County Hall.

The Chairman: Why is the road approaching the new bridge to be 120 ft. wide and the bridge only 90 ft.?

Witness explained that the traffic on the road would be frequently pulling up, whereas no traffic would pull up on the bridge itself.

The Chairman: You are making this road 50 per cent. wider than the Waterloo Bridge road.

Mr. Palmer said that the Waterloo Bridge road was too narrow for the traffic it had to carry at present, and, in any case, the road they were now discussing was a much more important road.

Sir Henry Cautley announced that the Committee had decided to ask the R.I.B.A. to send a representative of their own selection to give evidence before the Committee. They would be guided on the architectural treatment of the viaducts by that evidence.

Sir Percy Simmons agreed that the present scheme was really cut and dried by July, 1929. Asked whether, except for what was obtained from the newspapers and reports of the London County Council proceedings, Westminster City Council would not have known anything about it, the witness said that that was so, but Westminster City Council, he added, were not going to be asked to contribute to the cost of the scheme. He would accept counsel's statement that it was not until August that a copy of the proposed plan was sent, and then unofficially, to the city engineer.

CLEARING THE SLUMS OF EDINBURGH

Some Typical Reconditioning and Rebuilding Schemes

BY ROBERT HURD

The author here concludes his survey of recent work in the Scottish Capital within an area embracing the Grassmarket, Cowgate and Candlemaker Row, the relative positions of which were indicated in the map forming figure one in last week's issue.

THE example given in the first part of this article has no outstanding architectural merit, except as regards plan, but there are three others of a different order. The first is No. 17 Grassmarket, alongside the Vennel (the site of the City Wall). Of the original building there is both a photograph and a plan (figures eight and nine). On the ground floor there were two shops, and a typical upper floor contained one two-apartment and three one-apartment houses, all sharing one sink and w.c., the entrance to these floors being by a turret stair at the back of the building. Though the new plan (figure eleven) has the shops as before, the entrance stairs are moved to the front, opening off the Grassmarket, but with direct access to the very necessary close created at the back by demolition. The accommodation on a typical upper floor consists of two two-apartment houses with very ample offices, thus reducing the total residential accommodation of the block from three two-apartment and nine one-apartment houses to six two-apartment houses.

The street elevation of the new building (figure ten) is strictly symmetrical compared with the casual regularity of its predecessor, but to have reproduced the irregularities of the older block would have been sheer pedantry, and the new elevation seems to combine very happily the main lines of the old one, with direct expression of the modernized planning.

Only in one respect does the new offend, and that is in its advertisements. They say that a revision of the Advertisement Regulation Acts of 1906 and 1925 may be coming before Parliament soon, to make it illegal for any shop to disfigure a frontage by displaying the advertisements of a whole series of goods which it happens to sell. May this revision come soon! Here, now, is an example joyous in its blatancy and positively smart in the speed with which disfigurement of a carefully balanced front has been achieved in record time—for the building was first occupied only a few months ago. Edinburgh has so much to teach us with its early-nineteenth-century commercial architecture and lettering that it is doubly lamentable when the Corporation cannot prevent their own new buildings from being thus despoiled.

Figure twelve shows Nos. 74-82 Grassmarket in the last stages of picturesque but despondent squalor. The elements of the plan are evident—two houses with separate entrances to staircases at either side, sharing the ground floor with a fish restaurant and a public-house. The City Architect, having consulted with the Ancient Monuments Commission for Scotland, produced a new design for the site, sensibly reminiscent of its predecessor and very cleverly planned (figure fourteen). He has designed the block as one whole, having one central staircase leading to six two-apartment houses on the first, second and third floors, and only the public-house (double its original size) on the ground floor. The charming elevation (figure thirteen) is full of interest and is an improvement on the old one, and does, as much as the new 17 Grassmarket, combine the best features of the old elevation with direct expression of the new planning. In particular, the design of the public-house entrance and windows should be noticed.

On the edge of the area which we are considering is Candlemakers' Hall (figure fifteen). This interesting building, which is on a steep slope at the top of Candlemaker Row (see figure two), backing on to Greyfriars, had ceased for some time to have anything to do with candlemakers, and had been divided and subdivided until very few traces of the former richness of its interior decorations were left. It was also much decayed, and in most cities would probably have been long since demolished.

Fortunately, however, the outer walls were sound, and it has been gutted, partly replanned, some good panelling restored to its former state, and the whole put to new and more ambitious social uses than a series of apartment houses. The long-established smithy has continued in occupation of part of the ground and first floors, but the monks of St. Giles have taken the second and third floors of the lower part of the premises, and Toc H the first, second, third and attic floors of the upper and smaller part. In the attic is their chapel. The strong vertical emphasis which the two stair turrets give to the street front makes this building stand out very effectively from its neighbours; and the present attractive appearance of Candlemakers' Hall, not marred by unsightly signs, quite apart from its social value to such a neighbourhood, alone justifies the decision of the Corporation to allow the City Architect's department to undertake its reconditioning.

A good example of partial demolition and careful replanning is at Wardens Close, in the Grassmarket; and a hostel for men, planned on the lines of the women's hostel in Candlemaker Row, is about to be established at No. 8 Cowgate (figures sixteen and seventeen). The replanning of both these premises has been particularly tricky, and the finished result at Wardens Close is worth visiting.

If we take the premises at No. 17 Grassmarket (figure ten) as typical, it is possible to give some idea of the financial side of slum clearance. These premises have two shops on the ground floor (Nos. 15 and 19 Grassmarket) and six two-apartment houses above. This separation of the two parts is important, because the Government grant under the Housing Act of 1923, which is in the form of a repayment of half the deficit between the income (rents and rates) and expenditure (maintenance and loan charges) of the Corporation for all property of this kind, is only made in respect of residential property, and not for shops. No. 17, it will be remembered, was entirely rebuilt, and to give extra space at the back considerable demolition took place.

The cost was as follows:

Demolition—Building site	..	£54
space at back	..	275
Building—shops ..	.. ..	833
six two-apartment houses	.. ..	2,500
		£3,662

and the income:

Rates per annum—				
Shop	£3	8	3½	(average)
Two-apartment house ..	3	7	6	
Rent per annum—				
Shop	22	0	0	(average)
Two-apartment house ..	12	0	0	

(The rent per week of a two-apartment house works out at 4s. 6d. plus 1s. rates.)

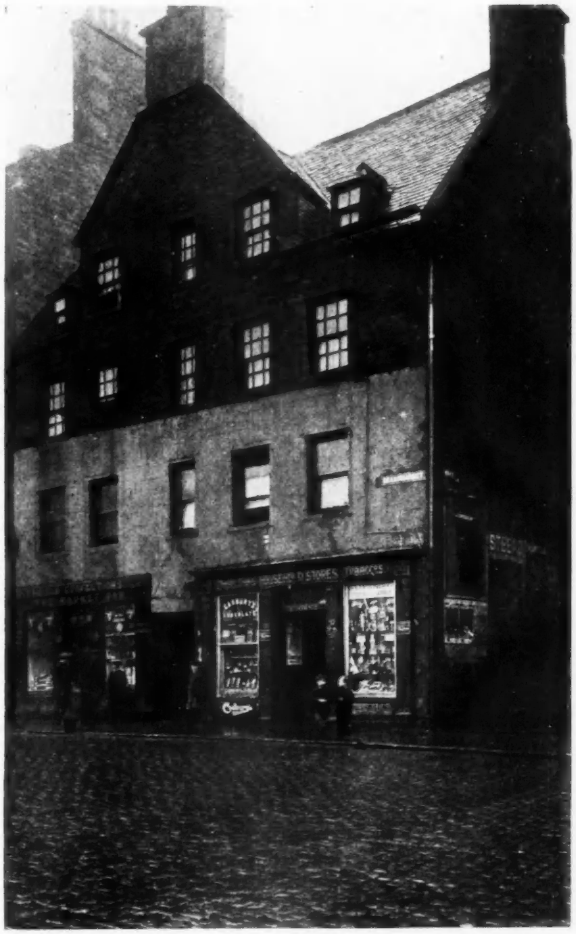


Figure eight. No. 17 Grassmarket before rebuilding. The front has but a casual regularity.



Figure ten. No. 17 Grassmarket after rebuilding. Its new symmetry was early spoiled by the signs.

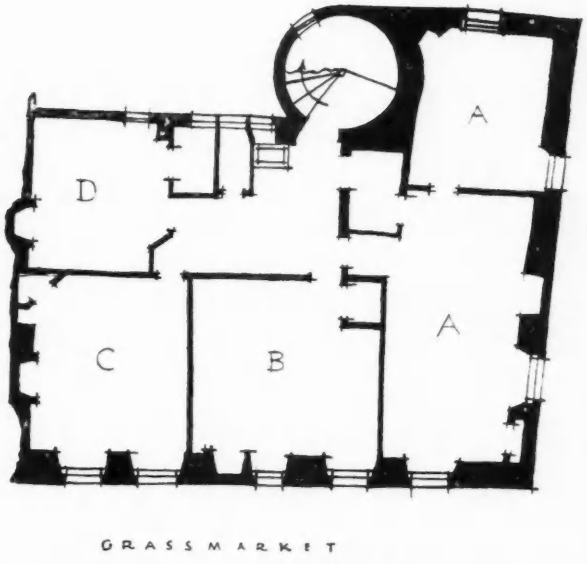


Figure nine. Plan of a typical floor of No. 17 Grassmarket, before rebuilding. Here lived four families, all sharing one sink and one w.c.

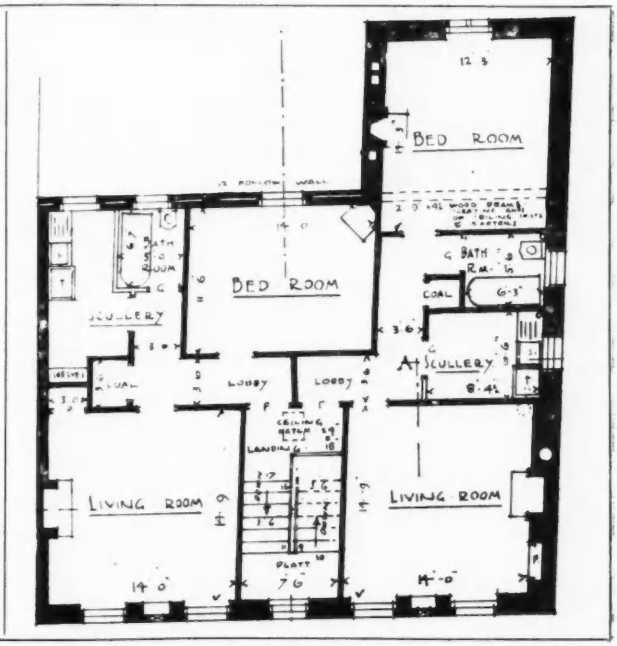


Figure eleven. Plan of a typical floor of No. 17 Grassmarket, after rebuilding, showing two two-apartment houses, with ample and convenient offices.



Figure twelve. Nos. 74–82 Grassmarket before rebuilding was taken in hand.

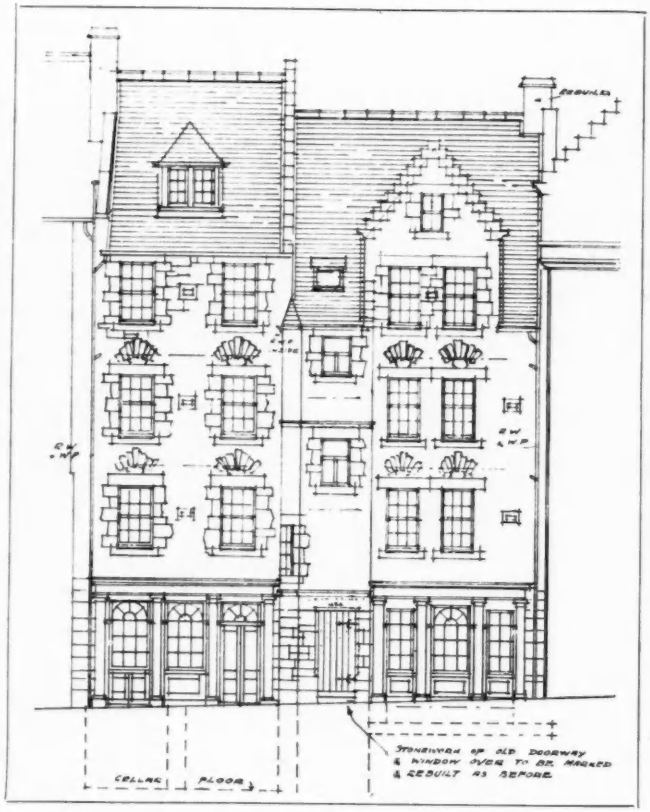


Figure thirteen. New elevation of Nos. 74–82 Grassmarket, now being built.

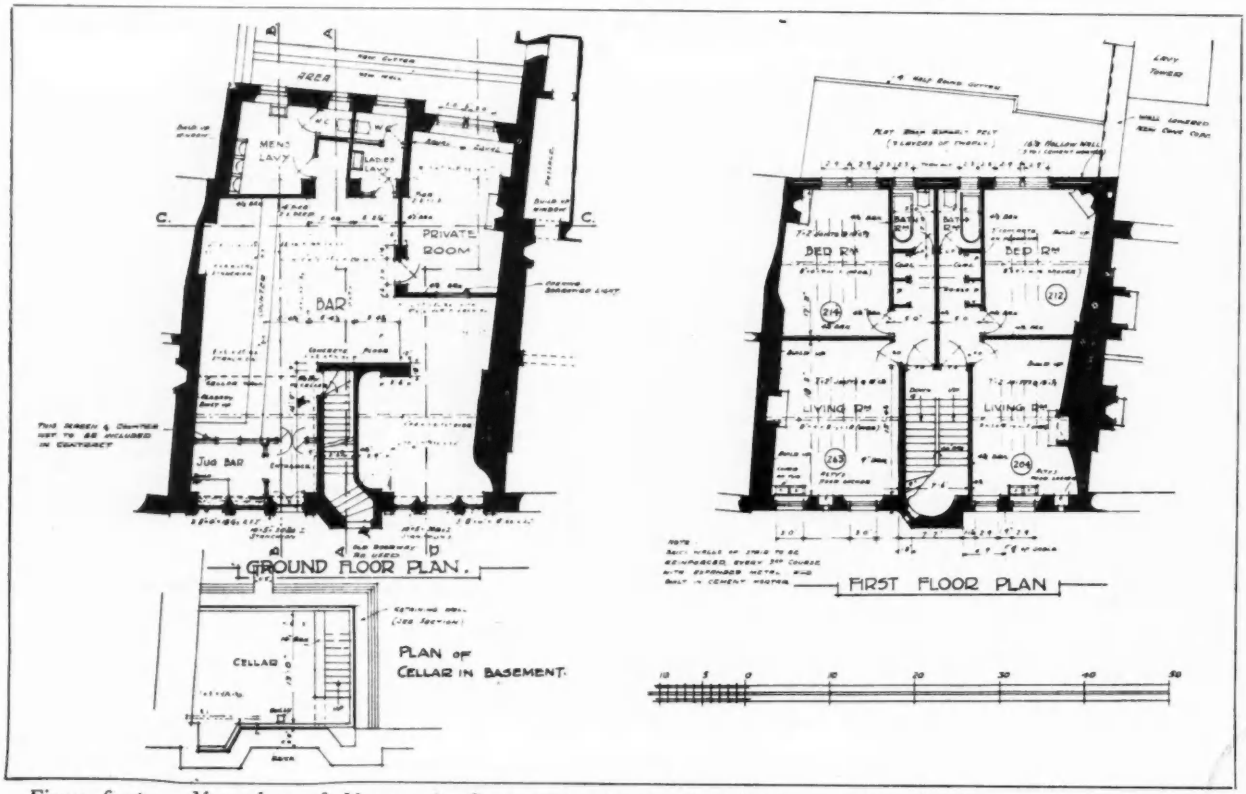


Figure fourteen. New plans of Nos. 74–82 Grassmarket, showing the public-house, replanned with an unusually large bar, on the ground floor and typical apartment houses on an upper floor.

The process of slum clearance obviously involves a severe reduction in the housing capacity of the area under treatment—for instance, we find that, whereas No. 17 Grassmarket formerly lodged twelve families, now only six live there.

It is not possible here to go into the problem consequent upon slum clearance—the rehousing of surplus population—beyond indicating that the Edinburgh Corporation have a scheme at Prestonfields, consisting of blocks of two-, three-, and four-apartment houses especially designed to ease the situation created by their slum clearance activities in the city.

In dealing with the Grassmarket only, instead of with the whole of Edinburgh's slum clearances, I have run the risks of selective treatment, but the complete nature of the slum clearance scheme in this area, including in its scope buildings of considerable interest, such as shops, a public-house, a social centre, and both men's and women's hostels, as well as ordinary apartment house accommodation, seemed to make it sufficiently representative to merit description by itself as a separate entity.

Of the enterprise, good taste and ingenuity of the City Architect and his department, these examples of reconditioning and rebuilding are ample evidence, and they will serve, one hopes, as an encouragement to other cities where slum clearance schemes are not so well conceived and carried out.

(Concluded)



Figure fifteen. Candlemakers' Hall, now divided between a smithy, the Monks of St. Giles, and Toc H. Figure two, in last week's issue, showed a general view of Candlemakers' Row and the Hall.

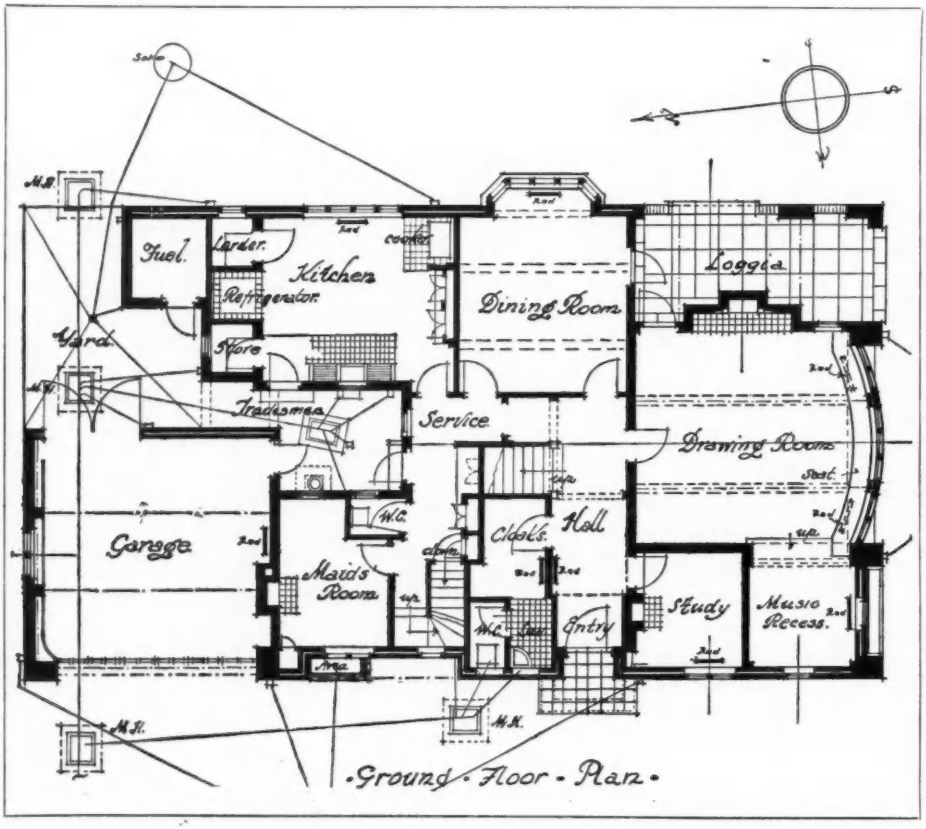




Figures sixteen and seventeen. The left- and right-hand portions, respectively, of No. 8 Cowgate, before reconditioning. Plans have been prepared for conversion into a hostel for men, on the lines of that for women illustrated, last week, in figure four.



The westerly, or main entrance front, showing the garage, with chauffeur's flat over, on the left, balanced against the study and music recess to drawing-room, with bedroom over, on the right. The walls are of brick to first-floor level and tile-hung above.



HOUSE IN

Addington

DESIGNED BY

FACING the Shirley Hills, and standing amidst pines, this house was planned to meet the special requirements of the owner. The ground-floor accommodation includes a comparatively small dining-room, a drawing-room, with a music recess, a study, and kitchen, etc. That on the first floor presents several points of interest. A self-contained flat, with bathroom, intended for the use of a chauffeur and his wife, has access by separate service stairs. Above the arched loggia of the ground floor is a sleeping balcony, with access from the play-room. Adjoining, but entered from the owner's bedroom, is a



In the southerly end, on the ground floor, the slightly bowed window of the drawing-room is the central feature, between a shallow seat recess and the end of the loggia. The window opening above lights two rooms—a bedroom on the left and playroom on the right of a central partition.

SURREY

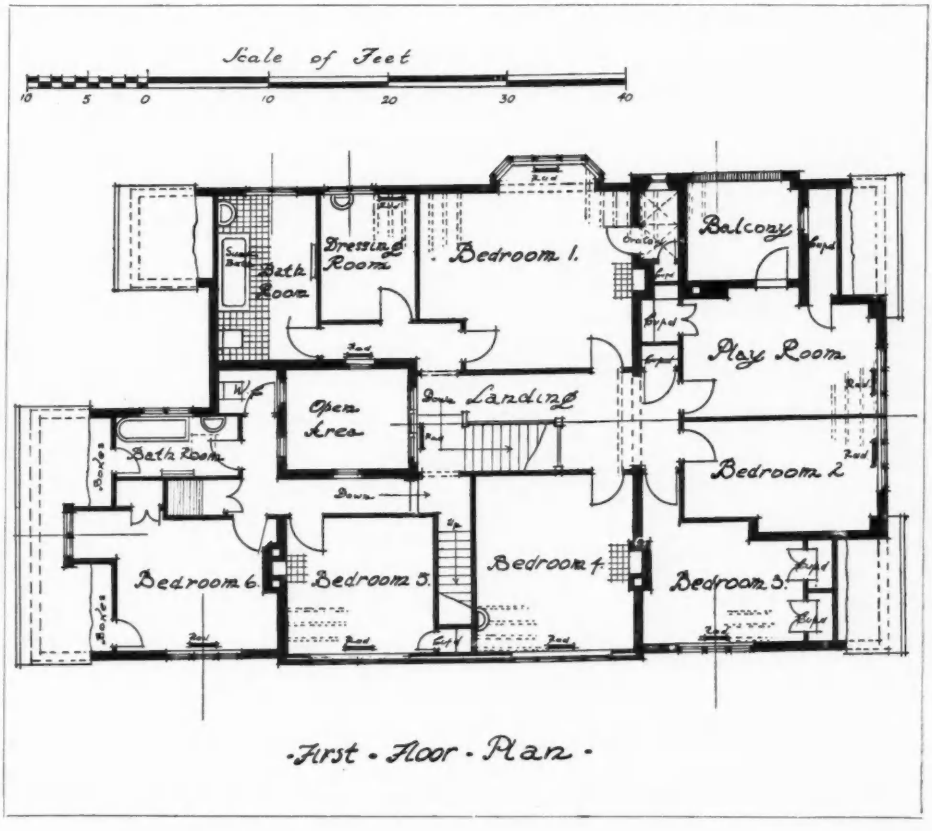
Park Estate

HUGH MACINTOSH

small private oratory, with a stained-glass window.

The incorporation of the garage gives symmetry to the front elevation. Similarly, in the end facing south, the loggia is balanced by a recess with a garden seat, under cover, and these flank the large, slightly bowed window of the drawing-room.

The ground-floor reception rooms are floored with oak, which is also used for panelling in the hall and dining-room; all joinery is in oak. The oratory has panelled walls and a domed ceiling. The kitchen is tiled to the ceiling, and has a refrigerator chamber; the service yard is completely screened.



LITERATURE

HOLIDAY IMPRESSIONS FROM ABROAD

SIR REGINALD BLOMFIELD's latest book, *Byways*, is a collection of holiday impressions from Provence, Central Europe, and Scandinavia.

In France, as in this country, many buildings have been ascribed to famous architects without a shadow of evidence, and not the least interesting part of the chapters on Provence deals with some of the provincial architects of the sixteenth and seventeenth centuries whose names have been overshadowed by their more eminent brethren.

The author's admiration for the cause of the French Protestants and a visit to the Musée du Desert, near Nîmes, is the excuse for a short history of the Camisard revolt in the Cevennes.

Sir Reginald's taste and fine scholarship render him an ideal travelling companion in South Germany and Austria, where under his guidance we are assisted to disentangle the fine points of baroque architecture from the meretricious overlay of the exuberant ornament. He traces the origin of this inconsequent art to the Italian architects, especially to Borromini, and his work at the Villa Falconieri at Tivoli as the *fons et origo* of all the trouble. In Italy the classic tradition was too strong for baroque to take deep root, but in Austria and Bavaria it flourished and achieved its most complete expression. Such buildings as the Abbey at Melk on the Danube and the work in Munich, with the exquisite little Amalienburg, go far to show that the style has a right to be called architecture, although, as the author points out, in many buildings the architect has been reduced to the position of organ blower to the decorator.

The chapter on Sweden pays a tribute to the work of the modern architects of the northern capital. Modern work in other countries is either ignored or treated brusquely; even the new City Hall at Stockholm receives some hard criticism. But, in spite of the asymmetry to which Sir Reginald objects, the building contains many traditional motifs. It is the hold Sweden has upon the past while reaching out to solve the modern problems that gives her architecture its academic balance.

The delicate pencil sketches by the author are beautifully reproduced, and sufficiently reinforced by photographs and plans to form a perfect balance of illustrations.

L. E. WILLIAMS

Byways: Leaves from an Architect's Notebook. By Sir Reginald Blomfield. London: John Murray. Price 15s. net.



The Japanese Palace, Dresden. A detail of one of the figures.

From Byways: Leaves from an Architect's Notebook.

LEEDS AND BRADFORD REGIONAL SCHEME: PART II

THE area covered by this large scheme stretches from the Ilkley moors in the north to Dewsbury and Wakefield in the south. It is, in the main, a region of big manufacturing towns and scattered industries, spread over a countryside cut into by rivers and streams, railways and canals: a hard-bitten, badly-worn country.

The problem of reducing the results of a century of haphazard growth into even the faintest semblance of order constitutes a test case for regional planning. This order is represented by three main divisions.

First, the areas covered by industry are to be limited to the positions best suited to it, which are to a certain extent those it now occupies, but with well-defined extensions along low-lying ground served by railways, roads and canals.

Secondly, residential districts are to be encouraged on higher ground above the level of industrial smoke, though not on the high moors. The residential problem is complicated by unusual factors, such as the habit among miners of living within reach of several mines, and, if possible, near factories where their womenfolk may work. This leads to the formation of complete dormitory towns in districts where it will be possible to protect amenities.

The third division is that of open space, and herein lies the salvation of the region; for if the process of straggling growth may be checked by zoning, the preservation of rural and rustic belts will define the new limits, and restore a disappearing sense of locality. It must be noted that segregation of residential districts is only possible with rapid transport and a network of communications. The sense of locality is of a new order.

A great many interesting matters, such as the question of restoring amenity in the wake of a fading coal-mining industry; the preservation of the beautiful valley of the Wharfe and the moorlands in the north of the region; methods of dealing with ribbon development, etc., must be left to be discovered.

E. M. F.

Leeds and Bradford Regional Scheme. Part II and conclusion. Thos. Thornton, Hon. Sec. to the Joint Town Planning Advisory Committee, 11 Park Street, Leeds. Price 11s. 3d., post free.

CORRESPONDENCE

CHARING CROSS BRIDGE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Does anyone know the reason why the proposed new Charing Cross Bridge does not land on the north bank opposite the end of Northumberland Avenue, thus giving a more direct line and some sort of a vista?

Surely, anything more awkward than the line shown by the model, with its nowhere-in-particular northern landing, it is hard to imagine.

H. R. FINN

ANCIENT WINDMILLS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I was exceedingly interested in the views of some old windmills, reproduced in your issue for February 5 last.

One of these, the Chesterton Mill, is, in my opinion, a "freak" windmill. This building, generally supposed to have been erected from the designs of Inigo Jones, was built in 1632 for use as an observatory. It was converted into a windmill about the middle of the last century, and therefore—from a miller's and an antiquarian point of view—is of no special interest. I believe I am correct in stating that it is the first windmill to be scheduled by the Office of Works, but as a specimen of a windmill it can hardly be called a genuine one.

The accompanying photographs are of the Skirlaugh postmill in Holderness, near Hull, and the Meling Bout wind and water mill, Bryndu, Llangwyfan, Anglesey, North Wales. The former has just been "scheduled," and is of an early type with a roundhouse of brick, added, probably, in the eighteenth century. The main post is a magnificent piece of oak and the framework on which it rests is supported on brick pillars (four) raised from the ground about six feet. These pillars were evidently built at the same time as the roundhouse, thereby raising the mill six feet. There are three pairs of French stones in the mill—two on one floor and one (a smaller pair) on another. This is a most unusual arrangement—in fact I know of no other mill where there are no grey-stones. Skirlaugh Mill worked with one pair of arms until 1911. The beam for turning the mill to the wind is to be seen above the stairway. The roof is of the old pattern—not semi-circular eighteenth-century style.

The latter, the Meling Bout wind and water mill, is the only one of its kind in existence. The wind power has not been used since 1911, and the owner will not provide new canvas for sails,



The Meling Bout Mill, Bryndu, Llangwyfan, Anglesey, North Wales.

but the water-wheel is geared to the same machinery as the wind sails, thus working the mill.

E. MITFORD ABRAHAM

IN PARLIAMENT

BY OUR SPECIAL REPRESENTATIVE

Bromley Town Planning

MR. SMITHERS asked the Minister of Health if he would state when a public inquiry was held into the preliminary statement of the Bromley Rural District Council, under the Town Planning Act; where the inquiry was held; whether public notice of the inquiry was given; and whether any copy of the evidence given and the conclusions arrived at can be obtained or inspected.

Mr. Greenwood: The public inquiry into the preliminary statement of the Bromley Rural District Council was held at the Council Offices, Orpington, on July 20, 1927, and public notice was given in the local press and posted in the district. I do not know of any publication of the evidence except what was contained in the Press. Comments on the proposals were communicated to the Council in March, 1928, and further consideration and negotiations on a number of matters have since been proceeding.



The Skirlaugh Postmill, Holderness, near Hull, which has recently been "scheduled."

London Squares

Mr. Greenwood, Minister of Health, stated that he proposes to introduce a Bill on London Squares this session, but he could not yet indicate a date.

Slum Clearance Bill

Mr. Greenwood presented the Housing (No. 2) Bill, a measure to make further and better provision for the clearance or improvement of unhealthy areas; the repair or demolition of insanitary houses, and the housing of persons of the working classes; to amend the Housing Act, 1925, the Housing, etc., Act, 1923, the Housing (Financial Provisions) Act, 1924, and the other enactments relating to housing subsidies; and for purposes connected with the matters aforesaid.

Steel Industry Inquiry

Mr. MacDonald stated that he understood that the Committee which was examining the position of the steel industry in this country hoped to be in a position to submit their report to the Government shortly after Easter.

Announcements

Messrs. Braddell and Deane have removed their offices to Victor House, Portman Square, W.1 (entrance, No. 1 Baker Street). Telephone Number: Welbeck 7397.

The partnership between Messrs. Eric L. Bird, A.R.I.B.A., and Hubert Clist, A.R.I.B.A., has been dissolved. Mr. Bird has entered into partnership with Mr. H. G. Atkin-Berry, A.R.I.B.A., at 45 Bloomsbury Square, under the title of Bird and Atkin-Berry.

Mr. Aubrey Lane, L.R.I.B.A., architect and surveyor, late of Burton Chambers, Mansfield, Notts., has taken into partnership Messrs. Philip M. Lane, his son, and W. Richardson White, both of whom have been associated with him for a number of years. The practice will in future be carried on under the style of Aubrey Lane, Son and White. The firm have now moved to more convenient premises at Leeming Chambers, Leeming Street, Mansfield, Notts., at which address they would be pleased to receive catalogues.

SOCIETIES AND INSTITUTIONS

ARCHITECTURE OF TODAY AND TOMORROW

DURING the course of a lecture on "The Architecture of Today and Tomorrow," delivered before a meeting of the Royal Society of Arts on March 26, Mr. Howard Robertson, F.R.I.B.A., stressed the fact that into architectural design at all periods of history had entered three main governing factors: first, the programme of practical requirements, i.e. the function or purpose of the building; secondly, the structure, by means of which practical realization was given to the programme; thirdly, the relationship, through design and decoration, of the material building to the abstract human emotions.

The evolution of architecture was, he said, traced through the development of these three factors. Modern architecture was that which responded to the programme of the day, was built according to the methods of the day, and fulfilled the "pleasure" requirements of the day. There was, therefore, no modern style as such. All architecture which, in its period, had been called advanced, i.e. fulfilled its purpose up to the available limits of human achievement, was modern. Even a revival might be modern, provided it were in tune with the material and æsthetic needs of its day. Taste today, he thought, was improving. Design was valued for its own sake, regardless of period. But the level was still low, particularly in street architecture, where the legitimate demands of commerce in the way of shop fronts, advertising by illuminated signs, etc., were being met in a very mediocre way. The possibilities of light, for instance, were only dimly felt; and cinemas and theatres, on the façades of which signs must inevitably find a place, were still designed with an architectural cloak which took no account of this vital element. The architect was partly to blame, but more so the building owner, who lacked imagination and confidence. The vicious circle so created was, however, gradually being broken.

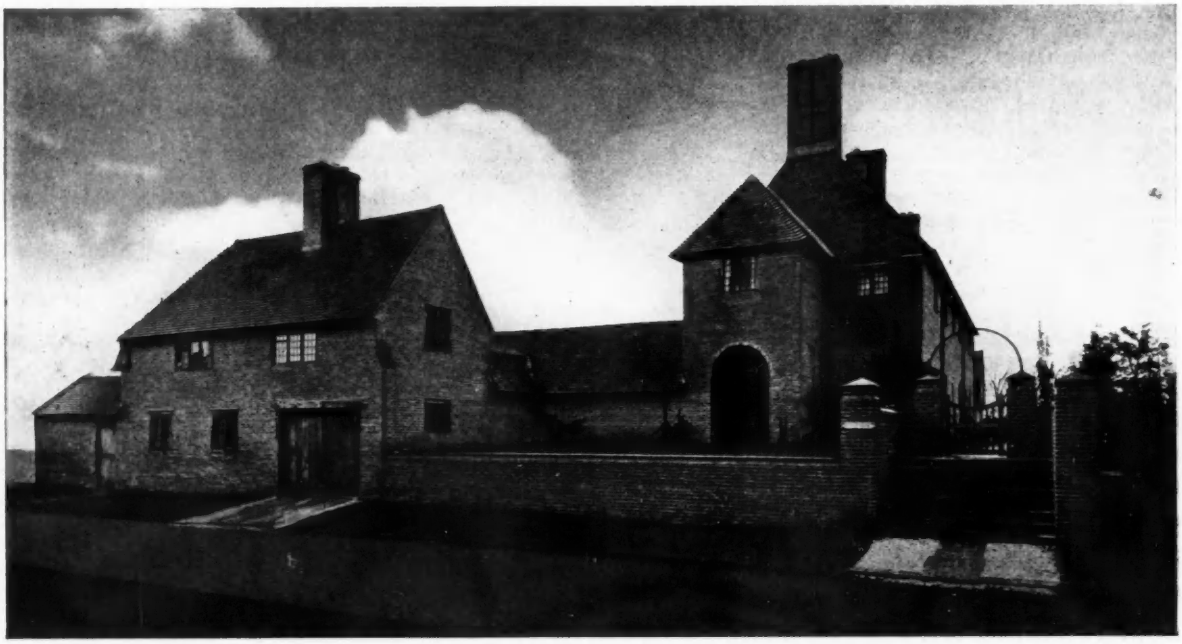
England, he pointed out, was terribly conservative in architectural design. One reason lay in the comparative stagnation of the past fifty years, and the lack of an evolutionary link between the past and the future, which made it difficult to create new forms alongside the old. Another cause was the reflection, in architecture, of the attitude which looked with satisfaction on past supremacy, and had neglected the progress made in other countries. It was likely, however, that the younger generation of architectural students, who were alive to the necessity for a changed outlook, would bring about a great development in which the spirit of modern design would be acclimatized to England.

The lecture was illustrated by over eighty lantern slides.

THE ARCHITECTURE OF SHOPS

Lecturing on the above subject at a meeting of the South-Eastern Society of Architects on March 27, Mr. H. V. Lanchester, F.R.I.B.A., said that success appeared a somewhat blatant theme for expression in design; but it need not take a vulgar form, since a confident dignity and assured efficiency were eminently suited to expression by means of building. If at times something more aggressive was demanded, a general recognition that this type of expression was relatively ephemeral might be hoped for, because the building that endeavoured to shout down its neighbour was repugnant to the idea of civic amenity, and it was, after all, as an element in civic life as a whole that they could best appreciate the value of the shop as an architectural asset. The large store was entitled to individual treatment by reason of its mass, but if the smaller shops attempted to compete with each other by over-accentuation, the appearance of our streets would become chaotic; such efforts ultimately neutralized each other and failed in achieving their aim.

The design of the shop, he said, should depend on the use to which it was to be put, and the faculty of realizing that there should be a harmony in this respect was of first importance to the designer, although in everyday practice there might be a certain amount of makeshift and compromise on the score of cost. In conflict with these efforts at special effects, they must have in the large stores a certain



Hillway, Ditchling, Sussex. Designed by A. J. Penty. This house forms the subject of photographic illustrations and working drawings in The Elements of Domestic Design, *a new book just issued by the Architectural Press.*

consistency and unity running through the whole.

Speaking from a designer's viewpoint, the shop, he said, offered many points of interest not afforded by the store; with the latter the general homogeneity, essential to a design as a whole, precluded too definite an adaptation of treatment to the peculiar needs of each department, whereas in the specialized shop one was free to adopt the exact type of design best suited to the goods to be displayed.

One could not picture a building equally appropriate to the accommodation of valuable articles bought and sold with circumspection and deliberation, or to those daily necessaries which were to be obtained with the least possible expenditure of time and trouble. In the one case the designer might fairly devote infinite pains to placing the transactions in an artistic environment; in the other a simple and business-like restraint, not inconsistent with good design, was the most that would be demanded.

We had, he pointed out, something to achieve in making the best use of natural light in a large block of buildings. In the one-story shop there was little opportunity in this direction, but now that entire buildings were being so utilized it was certainly open to question whether we were making the utmost use both of light from the roof or from the street fronts.

A matter that was too often neglected was the provision, in the design for the façade, of suitable areas for the display of the name and such other inscriptions and announcements as might be desired. The designer who neglected these had only himself to thank if he found his building afterwards disfigured by features conflicting with his intention.

Mr. Lanchester did not suggest that everything should be subordinated to such announcements, but the demands of most good businesses were not unreasonable in this respect, and were certainly legitimate requirements entitled to receive just as much consideration at the hands of the architect as those dealing with arrangement and other practical questions.

In conclusion, the lecturer said that what we most needed in our attitude towards the shop as fulfilling its initial purpose, and also as ministering to the dignity of the city, was a broader ideal, unhampered by restrictive traditions, but maintaining all those that were not out of harmony with actual progress. He had endeavoured to show that in design, at any rate, the utmost freedom was not incompatible with grace and charm, if the conception was based, as all architectural conceptions should be based, on the expression of the purpose of the building.

THE WELSH SCHOOL OF ARCHITECTURE

Sir Banister Fletcher, P.R.I.B.A., was the principal guest at the annual dinner of the South Wales Institute of Architects held at Cardiff on Thursday last.

Principal Rees, in proposing the toast of the "R.I.B.A. and its Allied Societies," said he would like to see a more vivid sense of making a town or city as beautiful as possible. A city should be the expression of the spirit of the people. Architects should have a strong sense of their social responsibility—they were building the mould in which the people were framed.

Speaking of the Welsh School of Architecture, he said as far as he could see there was only one thing lacking about the Welsh School of Architecture, and that was that it had not got what was called university recognition. What one would like to see would be something of this kind: the Welsh School of Architecture given university recognition by the University of Wales; and one would like to see along with that the title of Professor of Architecture and the Applied Arts given to Mr. Purchon, the principal of the school.

Their arts students might also be given facilities to attend qualifying courses in architecture and the applied arts.

Sir Banister Fletcher, in responding, expressed the hope that Principal Rees's suggestion could be carried out in the near future.

Other speakers included Lieut.-Col. E. H. Fawckner, the Lord Mayor of Cardiff, and Messrs. T. Alwyn Lloyd, F.R.I.B.A., G. C. Lawrence, R.W.A., F.R.I.B.A., and T. E. Gough.

DEVON AND CORNWALL ARCHITECTURAL SOCIETY

The annual meeting of the Devon and Cornwall Architectural Society was held at Plymouth on March 22. The retiring president, Mr. W. A. Vercoe, A.R.I.B.A., occupied the chair.

The President referred to the healthy financial state of the Society, and pointed out that the annual subscriptions to kindred societies had been recently increased. He also mentioned that the value of the prizes offered in the competitions open to students had been increased, and that the results had more than justified this expenditure. Mr. Vercoe, in his address, said that the trend of architectural design in this country was an interesting study at the moment. The cost of post-war building meant the scrapping of everything that was not absolutely essential to the purpose of the building, and in itself a good thing. The dressing-up of modern buildings with a substantial skin of columns and entablature, mouldings and skulls of animals fabricated in stone, was no longer seen in the best designs.

The prizes offered for the annual competition of measured drawings were awarded to Messrs. J. G. Reid and E. C. Hicks, both of Plymouth.

The following officers and members of Council were elected for the ensuing year: President: Mr. John Bennett, L.R.I.B.A., Exeter; Vice-presidents: Messrs. A. S. Parker, F.R.I.B.A., Plymouth, and A. H. Ough, F.R.I.B.A., Dawlish; Hon. treasurer: Mr. S. Dobell, Exeter; Hon. auditor: Mr. L. F. Toner, L.R.I.B.A., Exeter; Hon. secretary: Mr. J. Challice, A.R.I.B.A., Exeter; Members of Council: Messrs. R. M. Challice, W. J. M. Thomasson, A.R.I.B.A., E. Kemeys Jenkin, F.R.I.B.A., W. F. R. Ham, H. Alban Peters, A.R.I.B.A., B. W. Oliver, A.R.I.B.A., B. Priestley Shires, F.R.I.B.A., C. Cheverton, F.R.I.B.A., H. Victor Prigg, A.M.I.C.E., A. V. Rooke, F.R.I.B.A., W. W. Wood, A.R.I.B.A.; Associated Members of Council: Messrs. D. W. Cooper and A. T. Martindale, L.R.I.B.A.

Following the business of the meeting, Mr. W. W. Wood gave an account of the encouraging progress of the architectural department of the Central School of Arts and Crafts, Plymouth.

ROMAN ARCHITECTURE

Sir Banister Fletcher, P.R.I.B.A., in his lecture at the Central School of Arts and Crafts on Wednesday last, discussed the further development of architectural style which, he said, was consequent on the removal of the capital of the Roman Empire by Constantine in A.D. 324 from Rome to the old Greek city of Byzantium, which was renamed Constantinople. The change, he pointed out, was made from strategic and commercial considerations, and indicated the progressive commerce of those days.

ANNUAL MEETING OF THE N.A.H.V.D.E.E.

The twenty-sixth annual general meeting of the National Association of Heating, Ventilating and Domestic Engineering Employers was held on March 12. The president, Mr. F. A. Norris, was re-elected and the other officers were appointed as follows: vice-presidents, Messrs. R. C. Ching (London), Harry Walker (Newcastle-on-Tyne) and J. L. Musgrave (London); hon. treasurer, Mr. Stanley J. Benham (London); Council, Messrs. W. Mumford Bailey (London), W. Charles (Birmingham), Lewis Hill. (Liverpool), J. T. Leake (Newcastle-on-Tyne) and A. B. Potterton (Balham).

COMPETITION OF INDUSTRIAL DESIGNS

The public exhibition of works submitted in this year's open Competition of Industrial Designs, organized by the Royal Society of Arts, will be held

in the Exhibition Pavilion of the Imperial Institute, South Kensington, S.W., from August 2 to August 31 (Sundays included). Full particulars of the scholarships and prizes offered in connection with the competitions can be obtained from the Secretary of the Royal Society of Arts, Adelphi, London, W.C.2. Applications for forms of entry, labels, and instructions must be sent to the secretary of the society between May 1 and May 10, and the last day for receiving entries is May 26.

OBITUARY

DAVID RAESIDE

IT is with deep regret we record the death, on March 24, of Mr. David Raeside, a member of the firm of Sir John Burnet and Partners.

[It is hoped to publish an appreciation of Mr. Raeside in our next issue.]

WILLIAM J. MORLEY

We regret to record the death, after a short illness, of Mr. William James Morley, F.R.I.B.A., a well-known architect, of the firm of W. J. Morley and Son, Swan Arcade, Bradford. He was eighty-three years old.

Mr. Morley was responsible for the design of several large buildings, including the mills at Paisley, the Central Hall, Manchester, the Albert Hall, Manchester, and the Eastbrook Hall, Bradford, and also a large number of Nonconformist churches throughout England and Wales.

WALTER T. FALDO

We regret to record the death, on March 22, at his residence, Hillcrest, Purley, of Mr. Walter Thomas Faldo.

Mr. Faldo was the son of the founder of the firm of Thomas Faldo & Co., Ltd., and, on the death of his father, took control of the business. The firms of Thomas Faldo and Val de Travers were amalgamated in 1928, when he became joint managing director. He was fifty-six years of age.

Mr. William Lister Newcombe, F.R.I.B.A., of The Grove, Gosforth, Northumberland, left £83,266 (net personalty, £73,917).

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :

Surrey County Hall Extension (pages 529-533). General contractors, Leslie & Co., Ltd. Sub-contractors : Roberts, Adlard & Co., slating; Chubb and Son, safe; Elsley, Ltd., door furniture; W. H. Gaze and Sons, Ltd., tennis courts and bowling green; Grierson, Ltd., electric lighting; Guildford Glass Works, stained glass window; G. Jackson and Sons, Ltd., plasterwork; Jeffreys & Co., Ltd., heating and ventilating; Leeds Fireclay Co., Ltd., sanitary fittings; Luxfer Ltd., metal windows, staircase railing, lantern and skylights; Arthur Lyon & Co., electric clocks; Manu-Marble Co., marble paving and skirtings; Marryat and Scott, Ltd., passenger and service lifts; May Construction Co., Ltd., sound-deadening ; Merryweather & Co., fire hose and gear ; Norman and Underwood, internal and external plumbing; Roneo, Ltd., office partitions; Shipton Automatic Telephone Co., automatic telephones; J. P. White and Sons, Ltd., panelling; J. Wippell & Co., Ltd., staircase and balcony railing, main hall and wrought iron balconies; Nathaniel Hitch, carving of Royal Arms and entrance panels; George Alexander, stone and wood carving ; George K. Gray, heraldry.

Prince Edward Theatre (pages 534-538). General contractors, Griggs and Son, who were also responsible for the foundations, fireproof construction, plumbing and joinery. Clerk of works, F. Scruton. General foreman, E. Hollands. Sub-contractors : St. Mary's Wharf Cartage Co., Ltd., demolition and excavation; Ragusa Asphalte Paving Co., Ltd., dampcourses and asphalt; British Reinforced Concrete Engineering Co., Ltd., reinforced concrete; Wiggins - Sankey (Hammersmith), Ltd., bricks, tiles, and sanitary fittings; E. Young & Co., structural steel; Roberts, Adlard & Co., slates; A. Goldstein & Co., glass; The British Challenge Glazing Co., Ltd., patent glazing; Edward Evans and Sons, Ltd., patent flooring; Plastona Ltd., waterproofing materials; Carrier Engineering Co., Ltd., central heating, boilers and ventilation; Berkeley Electrical Engineering Co., Ltd., electric wiring, electric light fixtures, electric heating and bells; Brookes, Ltd., stairtreads and marble; F. Knight & Co., door furniture; Morris-Singer Co., casements and window furniture; A. Thornborough and Sons, Ltd., rolling shutters; F. A. Norris & Co., Ltd., iron staircases; H. E. Gaze, Ltd., plaster; Marc Henri and Laverdet, decorative plaster; J. Starkie Gardner, Ltd., and Garton and Thorne, Ltd., metalwork; Story & Co., textiles; Story & Co., and Jas. Shoolbred & Co., Ltd., furniture; Marryat and Scott, Ltd., passenger and service lifts; Frank Burkitt, signs.

House at Addington, Surrey (pages 546-547). General contractors, F. Ward and Sons. Sub-contractors : Geo. Withers, Ltd., oak floors and panelling; John Williams & Co., roof tiling; Wm. Edgar and Son, Ltd., heating; James Hooker, Ltd., casements and glazing; John Venning & Co., Ltd., sanitary fittings; Rust's Vitreous Mosaic Co., wall tiling; F. Wingfield, electric lighting; Benj. Ware and Sons, Ltd., bricks.

Shop Premises, Bristol (page 554). General contractors, A. Dowling and Son.

COMPETITION CALENDAR

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated this year. Assessors : Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums : £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs : April 28.

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit, £1 1s. Latest date for submission of designs : June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor : J. Ernest Franck, F.R.I.B.A. Premiums : £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs : June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor : Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall which is to be built on the site of the old town hall, at an approximate cost of £250,000. Assessor : Sir Brumwell Thomas. Premiums : £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs : July 31.

No date.—The Leicester Corporation invites local architects to submit designs for the erection of a library at West Humberstone. Assessor : Hugh Gold, F.R.I.B.A. Premiums : £75, £50, and £25.

Mr. Francis Jones, F.R.I.B.A., has been appointed assessor for the competition for the development of the old prison site, Carlisle. Particulars, etc., are not yet available.

The Incorporated Association of Architects and Surveyors has decided to arrange a competition to encourage the study and development of petrol stations planned to meet the commercial requirements of the distributors, but which may at the same time respect the beauty of natural surroundings. Various cash prizes, ranging from fifty guineas, will be offered by the association, and the competition, to be judged by independent assessors, is to be open to British architects and their assistants throughout the world. Particulars will be announced this month.

THE ARCHITECTS' DIARY

WEDNESDAY, APRIL 2

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Architects' Working Drawings. Until April 3. Also Students' Evening in connection with this Exhibition. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. "Building Craftsmanship." By Nathaniel Lloyd, O.B.E., F.S.A. Professor Charles H. Reilly, O.B.E., M.A., F.R.I.B.A., will preside. **8 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "Regional Planning." By Raymond Unwin, F.R.I.B.A. Helen Ward (Miss) will occupy the chair. (Lantern Illustrations.) **8 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Tees-side Sub-Centre. At the Cleveland Technical Institute, Middlesbrough. Annual General Meeting, 7 p.m. "The Breaking Performance of High-Power Switchgear and of a New Form of Quenched-Arc Switch." 7.30 p.m. **7 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Students' Meeting. "Some Notes on Electric Traction in England." By John L. L. North, STUD.M.INST.C.E. Sir Archibald Page, M.INST.C.E., will preside. **6.30 p.m.**

MAIDSTONE ASSOCIATION OF BUILDING AND ALLIED TRADES. At the Church Institute, Union Street, Maidstone. "The Causes and Prevention of Dry Rot." By E. H. B. Boulton. **7 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W. 1. Visit to Wellington Barracks and the Guards' Chapel, under the guidance of Sir Neville R. Wilkinson, K.C.V.O., F.S.A. **2.30 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Exhibition of Photographs of Continental Sculpture. 10 a.m. to 6 p.m. Until April 17. **10 a.m.**

MANSARD GALLERY, 196 Tottenham Court Road, W.1. Exhibition of Modern Glass and Colour Prints, Mansard Annexe. Exhibition of Landscape Painting. Open until April 17.

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields. W.C. 2. Open every Tuesday, Wednesday, Thursday, and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

IDEAL HOME EXHIBITION, Olympia, W. Organized by *The Daily Mail*. Open until April 17.

THURSDAY, APRIL 3

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Students' Evening. **7 p.m.**

FRIDAY, APRIL 4

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "The Decentralization of Industry." By Captain R. L. Reiss. Dr. Sybil Plant will occupy the chair. **8 p.m.**

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Council Meeting, 3 p.m. General Meeting, 6.15 p.m. **3 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Indian Section. "The Maratha Nation." By Lieut.-Col. Sir Wolseley Haig, K.C.I.E., C.S.I., C.M.G., C.B.E. Sir E. Denison Ross, C.I.E., PH.D., will preside. **4.30 p.m.**

ROYAL SANITARY INSTITUTE. In the Council Chamber, Plymouth. Sessional Meeting. Discussion on "The Reconstruction and Reconditioning of Working Class Houses," to be opened by Councillor A. E. H. Webb. Edward Willis, M.INST.C.E., F.S.I., M.INST.T., will preside. **6 p.m.**

INSTITUTION OF MECHANICAL ENGINEERS, Storey's Gate, S.W.1. "Smoke." By A. Lennox Stanton. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Studies in Low-Power-Factor Measurements at High Voltages." By E. H. Rayner, D.SC., W. G. Standring, M.A., R. Davis, M.SC., and G. W. Bowdler, M.SC. **7 p.m.**

SATURDAY, APRIL 5

Sunrise, 5.29 a.m. Sunset, 6.38 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Visit to Marble Arch Flats, adjoining Regal Cinema. Meet main doorway in Great Cumberland Place at 2.30 p.m. **2.30 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. Conference on "Planning the England of the Future." Hon. Humphrey Pakington, A.R.I.B.A., and A. T. Pike. 2.30 till 4.15 p.m. Professor Percy Dearmer, D.D. 5 till 6.30 p.m. F. J. Hiorns will occupy the chair on both occasions. (Lantern illustrations.) **2.30 p.m.**

ROYAL SANITARY INSTITUTE. In the Council Chamber, Plymouth. Discussion on "Port Sanitation," to be opened by Dr. P. B. P. Mellows. 10.30 a.m. Lunch at 1 p.m. Meet at Guildhall Square at 2.30 p.m. for visits to (1) the Council Housing Estates; (2) the Co-operative Society's Pasteurising Plant: (3) the Hospital Ship "Flamingo" (weather permitting). **10.30 a.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Students' visit to the Works of the Ford Motor Company, under construction at Dagenham.

MONDAY, APRIL 7

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Antonio da San Gallo the Younger." By J. Hubert Worthington, O.B.E., M.A., A.R.I.B.A. **8 p.m.**

CARPENTERS' COMPANY, Carpenters' Hall, E.C.2. "The Rainbow." By Professor Wagstaff.

SURVEYORS' INSTITUTION, 12 Great George Street, Westminster, S.W.1. "The Future of British Agriculture." By Professor T. H. Wibberley. **8 p.m.**

TUESDAY, APRIL 8

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Textile Lighting." By S. Anderson, B.SC. **7 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Ordinary Meeting. "The Rebuilding of the Bassein Bridges on the Bombay, Baroda and Central India Railway." By Benjamin B. Haskew, M.INST.C.E., and "The Reconstruction of the Attock Bridge across the River Indus on the North-Western Railway, India." By William T. Everhall, O.B.E., M.INST.C.E. **6 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Royal Technical College, Glasgow. Annual General Meeting and Ordinary Meeting. **7.30 p.m.**

UNIVERSITY SETTLEMENT, Nile Street, Liverpool. At the David Lewis Club, Great George Place, Liverpool. Lectures on Housing and Town Planning subjects. Visits to new housing estates, tenements and slum districts. Papers will be given at 9.45 a.m. and 8 p.m. Applications for accommodation not later than March 28. Also lectures on April 9 and 10. **9.45 a.m.**

WEDNESDAY, APRIL 9

ARCHITECTURE CLUB, 229 Strand, W.C.2. At the Architectural Association, 34 Bedford Square, W.C. Supper discussion on "Relation of Sculpture to Architecture." Supper, 7.45 p.m. Discussion, 8.30 p.m. **7.45 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Preserving our Heritage." By Clough Williams-Ellis, F.R.I.B.A. Hon. Humphrey Pakington, A.R.I.B.A., will occupy the chair. **8 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Informal Meeting. "Recent Developments in Railway Permanent-way Practice, with particular reference to the Use of Metal Sleepers." By Samuel T. Dutton, M.INST.C.E. Sir Clement D. M. Hindley, K.C.I.E., will preside. **6 p.m.**

THURSDAY, APRIL 10

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Liverpool Cathedral." By Rev. Canon W. Thompson Elliott, M.A., Vicar of Leeds. (Lantern Illustrations.) **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Surge Investigations on Overhead Lines and Cable Systems." By S. W. Melsom, A. N. Arman, B.SC. (ENG.), and W. Bibby, B.SC. (ENG.). (Light Refreshments at 5.30 p.m.) **6 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. "Some Interesting Arc-Welded Jobs." By H. B. White and R. Tuddenham. (Lantern Illustrations.) **7.30 p.m.**

NORTHERN POLYTECHNIC, Holloway, N.7. Department of Architecture, Surveying and Building. Annual Speech Night. **7 p.m.**

FRIDAY, APRIL 11

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Excursion to Motor Vehicle and Engine Works of Messrs John I. Thornycroft, Basingstoke.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Modern Civilisation in the Countryside." By J. M. Kennedy. Professor Percy Dearmer, D.D., will occupy the chair. **8 p.m.**

ROYAL SANITARY INSTITUTE. At the Town Hall, Chatham. Sessional Meetings. Tea 4 p.m. Discussion on "Modern Elementary School Construction," to be opened by R. L. Honey, F.S.I., M.INST.M. and CY.E.; and "Special Difficulties in Housing," to be opened by T. Topping, F.S.I.A. Edward Willis, M.INST.C.E., F.S.I., M.INST.T., will preside. 4.30 p.m. **4 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Address by Colonel Sir T. F. Purves, O.B.E., President of the Institution. **6.15 p.m.**

SATURDAY, APRIL 12

Sunrise, 5.13 a.m. Sunset, 6.50 p.m.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. Visit to St. Albans. (2s. 6d. return). Meet at rear entrance of Guildhouse at 2.30 p.m. **2.30 p.m.**

ROYAL SANITARY INSTITUTE. At the Town Hall, Chatham. Meet at Town Hall for visits to the Rochester and Chatham Joint Sewerage Works, the Royal Naval Hospital, and to a certified Milk Farm and Pasteurization Plant. **10 a.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Deptford Power Station of the London Power Co. **2.30 p.m.**

SUNDAY, APRIL 13

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Sunlight." By Dr. C. W. Saleeby, F.R.S.E. Clare Greet (Miss) will occupy the chair. **3.30 p.m.**

MONDAY, APRIL 14

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Decentralization of Industry." By Dr. Raymond Unwin. **5 p.m.**

CARPENTERS' COMPANY, Carpenters Hall, E.C.2. "The Preservation of St. Paul's Cathedral." By Canon Alexander. The Lord Bishop of London will preside.

INSTITUTION OF ELECTRICAL ENGINEERS. North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. Annual General Meeting. Mersey and North Wales (Liverpool) Centre. At the Laboratories of Applied Electricity, The University, Liverpool. Annual General Meeting. Both meetings will be held at 7 p.m. Western Centre. At Cheltenham. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.) and L. C. Grant. **7 p.m.**

WEDNESDAY, APRIL 16

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Ultra-Violet Ray Transparent Window Glass." By S. English. **8 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. "Weymouth: Bincleaves Firing Station; Repairing and Strengthening of Reinforced-Concrete Pier." By Peter A. Scott, B.SC., STUD.INST.C.E. F. E. Wentworth-Shields, O.B.E., M.INST.C.E., will preside. **6.30 p.m.**

THURSDAY, APRIL 17

IDEAL HOME EXHIBITION, Olympia, W. Last day of the exhibition organized by *The Daily Mail*.

GOOD FRIDAY, APRIL 18

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Five-day Tour to Amsterdam.

SATURDAY, APRIL 19

Sunrise, 5.57 a.m. Sunset, 8.2 p.m.

EASTER MONDAY, APRIL 21

THURSDAY, APRIL 24

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Architecture in its Relation to Modern Life." By Alfred C. Pessem, F.R.I.B.A. **6.30 p.m.**

FRIDAY, APRIL 25

INSTITUTION OF ELECTRICAL ENGINEERS. West Wales (Swansea) Sub-Centre. "Surge Investigations on Overhead Line and Cable Systems." By S. W. Melsom, A. N. Arman, B.SC. (ENG.), and W. Bibby, B.SC. (ENG.).

SATURDAY, APRIL 26

Sunrise, 5.43 a.m. Sunset, 8.14 p.m.

MONDAY, APRIL 28

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Architects' Drawings of 1800–1850." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. **8 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. General Meeting. "Aerial Surveying and Archæology." By O. S. G. Crawford. **8 p.m.**

WEDNESDAY, APRIL 30

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Annual General Meeting. **8 p.m.**

THURSDAY, MAY 1

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S.

FRIDAY, MAY 2

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Meter and Instrument Section. "The Metering Arrangements for the 'Grid' Transmission System in Great Britain." By C. W. Marshall, B.SC. **7 p.m.**

SATURDAY, MAY 3

Sunrise, 5.30 a.m. Sunset, 8.24 p.m.

TUESDAY, MAY 6

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Luminous Traffic Signals." By T. Austin. (Light refreshments at 6.30 p.m.) **7 p.m.**

THURSDAY, MAY 8

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. Ordinary and Annual General Meetings. **6.30 p.m.**

FRIDAY, MAY 9

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual General Meeting. "The Rotary Automatic Telephone System." By J. W. Moffatt and J. C. Emerson. **6.15 p.m.**

SATURDAY, MAY 10

Sunrise, 5.18 a.m. Sunset, 8.36 p.m.

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Annual General Meeting. Address by G. C. Laurence, F.R.I.B.A., R.W.A., Chairman of Allied Societies Conference. **6.15 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BARKING U.D.C. has received sanction to borrow £7,300 for the erection and equipment of an elementary school.

The BECKENHAM Education Committee is to erect an elementary school for 500 children, in Witham Road.

Plans passed by the CAMBERWELL B.C.: Garages, Brabourne Grove, for Mr. F. Nash; shops, Queen's Road, for Mr. H. W. Cash; two shops, East Dulwich Road, for Mr. F. Nash; parish hall, Brunswick Square, for Messrs. Newbury and Fowler.

Surrey Education Committee has purchased six acres of land at CHEAM, for the erection of a central school.

The L.C.C. is to enlarge the Lots Road pumping station, CHELSEA, and construct a relief sewer at WALHAM GREEN, at a cost of £250,000.

The L.C.C. is making arrangements for the development of land at CLAPHAM PARK, for the erection of 713 dwellings.

Messrs. Grant Bros., drapers, are to erect new premises in Surrey Street, CROYDON.

The L.C.C. is to construct a pumping station and relief sewer at DEPTFORD, at a cost of £230,000.

The HACKNEY B.C. has passed plans for the erection of houses in Upper Clapton Road, for Mr. W. M. Brand, and for a motor-coach station, 55 Stamford Hill, for Messrs. Pite, Son and Fairweather.

The governors of the Haberdashers Aske's School, HAMPSTEAD, are to erect laboratories, etc., at a cost of £14,000.

Mr. A. J. Butcher, architect, is developing the Tithe Gardens Estate, HENDON.

The ILFORD Education Committee has obtained the approval of the Board of Education to plans of the proposed Beal Central School, for about 800 children, at an estimated cost of £49,266.

Plans passed by the ILFORD Corporation: Warehouse, High Road, for Messrs. Cakebread, Robey & Co.; shop alterations, 213 High Road, for Maypol Dairy Co., Ltd.; workshop, Ley Street, for Messrs. Haines and Warwick, Ltd.; six shops and houses, Ley Street, for Messrs. Montagu Holmes and Sons; workshop, Ilford Hill, High Road, for Messrs. Grant and Livingstone; fourteen houses, Brook Road, for Mr. J. Aldridge; additions, 512–514 Green Lane, for Mr. G. H. Marshall; alterations, printing factory, Ley Street, for Messrs. Lowe, Aston, Ltd.; seven houses, Lincoln Gardens, for Mr. A. P. Griggs; four houses, Campbell Avenue, for Mr. W. Edwards; sixteen houses, Westrow Gardens, for Messrs. J. W. Moore and Sons, Ltd.; parsonage house, Woodford Avenue, for Messrs. Tenison and Minty; shop, Eastern Avenue, for the London Co-operative Society; forty-three houses, St. Leonard's Gardens, for Mr. T. Anders; church hall, Mossford Green, for Mr. E. Meredith; four houses, South Park Drive, for Mr. J. Aldridge; additions, King George's Hospital, Hatch Lane, for Messrs. C. J. Dawson, Son and Allardyce; twelve houses, South Park Road, for Messrs. Polland Bros.; seven houses, Westrow Gardens, for Messrs. J. W. Moore and Sons; meeting hall, Danehurst Gardens, for Mr. F. Fisk; fifteen houses, New North Road, for Mr. W. Edwards; two shops, Ley Street, for Messrs. Haines and Warwick; six shops and twelve flats, Ley Street, for Mr. W. J. Lewis; twenty-two houses, Eastern Avenue, for Mr. J. Aldridge; six shops, High Street, Barkingside, for Mr. V. C. Hobbs.

The Metropolitan Railway Co. is to reconstruct the Sheepcote Road bridge at KENTON, near Harrow.

The Surrey Education Committee has decided to expedite the scheme for the erection of the proposed new Tiffin girls' school, KINGSTON.

Messrs. J. J. Hodgson and Sons, Ltd., of Tolworth, are developing a building estate on the KINGSTON by-pass road.

The L.C.C. is to vote estimates for the year for the following schemes: Reconstruction of Waterloo Bridge, £300,000; road widening to the docks, £290,000; Lambeth Bridge reconstruction, £240,500; and Putney Bridge widening, £173,000.

The LEE Conservancy Board is to undertake various works to prevent floods, at a cost of £690,000.

Plans passed by the LEWISHAM B.C.: Ten houses, Coniston Road, for Mr. A. Frampton; ten houses, Callander Road, for Mr. H. R. Watt; mission hall, Churchdown, Downham, for Mr. W. R. T. Alexander.

The L.C.C. Education Committee is to modernize the sanitation at the schools in the following districts: Monnow Road, Bermondsey; Stewart Headlam, Bethnal Green; Blackheath Road, Dreadnought and Glenister Roads, Greenwich; Buckingham Street, Islington; Portobello Road, Kensington; Brockley Road, Lewisham; St. Leonards Road, Poplar; Silwood Street, Rotherhithe; and Deal Street, Whitechapel and St. George's.

The POPLAR B.C. has prepared plans for the construction of a subway at Bow Road, at a cost of £17,000.

Plans passed by the POPLAR B.C.: Rebuilding, "The Royal Charlie" public-house, Chrisp Street, and "Steamship" public-house, Naval Row, for Mr. G. Barker; additions, Bow Common Cottage, Bow Common Lane, for Mr. H. Morris on behalf of the Gas Light and Coke Co.; additions, Millway Wharf, Manchester Road, for Messrs. Hobden and Porri; additions, Norton's Wharf, Manchester Road, for Messrs. J. and R. Roof; conveniences, Millwall recreation ground; East Ferry Road, for the L.C.C. Parks Department; additions, 80 Wallis Road, for Messrs. Clarke, Nickolls and Coombs, Ltd.

The Surrey Education Committee has obtained a site in RAYNES PARK, for the erection of a secondary school for boys for the Wimbledon district.

Plans passed by the ST. PANCRAS B.C.: Addition and range of three one-story garages, rear of 104 Regent's Park Road; building, 236, 238 and 240 Pentonville Road.

The SOUTHWARK Central School is to be modernized at a cost of about £5,000.

The L.C.C. has obtained a site in Clapham Road, STOCKWELL, for the erection of dwellings, at a cost of £112,000.

The Surrey Education Committee has approved plans for the erection of a school for 700 children, at New Town, SUTTON.

Middlesex C.C. has sold surplus land on the Cambridge arterial road at TOTTENHAM, to Messrs. Jackson Bros., who are developing an estate.

The L.C.C. Education Committee is to reconstruct and enlarge the WALWORTH Central School, at a cost of £26,000.

The WANDSWORTH B.C. has obtained the sanction of the Ministry of Health for the purchase of property for the Wandsworth Plain improvement scheme.



Shop premises, Castle Street, Bristol. Designed by W. S. Skinner and Sons. The façade is of brick, with freestone dressings to windows. The roof, which at the rear slopes down from the ridge to the first-floor ceiling level, is covered with pantiles.

The Board of Education has approved the revised sketch plans of the Surrey Education Committee, for the proposed extension of WIMBLEDON technical institute. The architects have been instructed to prepare working drawings for submission to the Board.

The L.C.C. is to provide additional accommodation at the Brook Hospital, WOOLWICH, at a cost of £50,000.

SOUTHERN COUNTIES

Plans passed by the BRIGHTON Corporation: Alterations and additions, 6 Hampton Place, for Messrs. Field and Cox, Ltd.; extensions, 23 London Road, for the Brighton and Hove Wine Co., Ltd.; workshop, rear of 22 Preston Road, for Messrs. Milner and Casselden, Ltd.; five shops, Belvedere Terrace, for Palmeira Avenue Mansions Estate Co.; two houses, Warmdene Road, for Mr. J. A. Yetman; four shops, Carden Avenue, and two houses, Graham Avenue, for Mr. E. H. Rowe; two houses, Peacock Lane, for Mr. H. W. Adams; shop, 29 London Road, for Saxone Shoe Co., Ltd.; rebuilding, 169-174 Western Road, for British Home Stores, Ltd.; eighteen houses, Eastbourne Road, for Messrs. Braybons, Ltd.; additions, "Barclay Home," Wellington Road, for Barclay Home Committee; rebuilding 129 London Road, for Mrs. S. Bellman.

The Surrey C.C. reports that preliminary plans to provide accommodation for 600 additional patients and staff at BROOKWOOD and NETHERNE have now received the approval of the Board of Control. The architect has been instructed to prepare the working drawings.

The Surrey C.C. has approved plans for the erection of a court house on the site adjoining the existing police station, at FARNHAM, at an estimated cost of £4,000.

Local authorities have in view a drainage scheme for the HASLEMERE district, estimated to cost £250,000.

Plans passed by the HERNE BAY U.D.C.: Two houses, Linden Avenue, for Mr. E. Nicholas; bungalow, Linden Avenue, for Messrs. Goodwin and Russell, Ltd.; two houses, Central Avenue, for Mr. E. J. Line; house, Canterbury Road, for Colonel F. W. Leaver; house, Downs Park, for Messrs. Woolf Bros.; warehouse, Albany Drive, for Mr. W. G. Atkins; house, Bournemouth Drive, for Mr. C. B. Smith.

The Surrey Education Committee is to undertake alterations at various schools at HORLEY, at a cost of £5,000.

The Surrey C.C. has decided to erect a chapel at the MILFORD Sanatorium, at a cost of £3,500.

The NEWBURY Corporation is preparing a slum clearance scheme.

Messrs. A. N. Kendal, Ltd., are to erect a cinema on the site of Kendrick House, NEWBURY.

Plans passed by the NEWBURY Corporation: Two houses, Essex Street, for Mr. T. Plumb; two houses, Falkland Road, for Mr. F. O. Cooke; four houses, Newport Road, for Mr. W. Brazier; two houses, Greenham Mill Lane, for Mr. J. Durnford; alterations and additions, 52 Newtown Road, for the Corporation.

The PORTSMOUTH Watch Committee has passed plans prepared by Mr. R. A. Thomas, for alterations at the Scala Cinema, Elm Grove.

The Surrey C.C. is to reconstruct the bridge at RIPLEY, at a cost of £5,844.

SOUTH-WESTERN COUNTIES

The PLYMOUTH Corporation is considering the erection of a new bandstand and enclosure on the Hoe Promenade.

The PLYMOUTH Education Committee is considering the advisability of providing a new elementary school at Mount Gold.

The PLYMOUTH Corporation is to erect a branch library in the Devonport area, at an estimated cost of £5,000.

The PLYMOUTH Corporation has obtained sanction to a loan of £5,500 for the purchase and adaptation of premises in Fore Street, as showrooms for the gas department.

MIDLAND COUNTIES

The BIRMINGHAM Corporation is to erect a bandstand in Aston Park, at a cost of £3,000.

The BIRMINGHAM Corporation is to erect a community building in Kingston Hill recreation ground, at a cost of £4,500.

The BIRMINGHAM Corporation is acquiring land at Frankley, for purposes of waterworks and service reservoirs.

The BIRMINGHAM Corporation is to erect pavilions in the parks, at a total cost of £18,000.

The BIRMINGHAM Corporation is extending its electricity system, involving the erection of buildings estimated to cost £39,000.

The COVENTRY Education Committee is to erect a new Council school at Tile Hill Lane, at an estimated cost of £25,473.

The DUDLEY Corporation has approved plans, prepared by the borough engineer, for the extension of Netherton clinic.

The DUDLEY Corporation has asked the borough engineer to prepare estimates for the reconstruction of Woodside, Primrose and Bishton bridges over the canal.

The DUDLEY Corporation Housing Committee has approved a scheme submitted, by the borough engineer, for the erection of 470 houses on the Priory estate.

Plans passed by the DUDLEY Corporation: Workshop, Hope Street, for Messrs. A. Loach and Sons; additions to 'brewery, Greystone Street, for Messrs. J. Hanson and Sons, Ltd.; house, Stourbridge Road, Holly Hall, for Mr. J. Detheridge; house, Oakham Road, for Mr. Herman Smith; alterations to shop and stores, Halesowen Road, Netherton, for Dudley Co-operative Society, Ltd.; stores, Cradley Road, Netherton, for Mr. B. Harris; coach workshop, New Rowley Road, for Mr. B. Woodall; four garages, Union Street, Netherton, for Mr. E. Smith; elementary school, Dudley Wood Road, for the Education Committee; house, Halesowen Road, Netherton, for Mr. A. Oldacre; alterations, Priory Street, for the Herald Press, Ltd.; workshop, Cradley Road, Netherton, for Mr. W. Roberts; warehouse, Castle Hill Road, for Messrs. S. C. Lloyd (Wholesale), Ltd.

The Stoke-on-Trent Corporation is negotiating for a site in Whieldon Road, FENTON, for the erection of baths.

Plans passed by the GLOSSOP Corporation: Rebuilding, Victoria Inn, for Messrs. Gartsides Brewery Co., Ltd.; bungalow, Hadfield Road, Hadfield, for Mr. J. A. Robinson; shop and bakehouse, Hadfield Road, for Mr. W. Dewsnap; house, Newshaw Lane, Hadfield, for Mr. J. Wood.

The Stoke Corporation is to lay out the aerodrome site at MEIR, at a cost of £8,000.

The SMETHWICK Corporation is to erect, by direct labour, twenty houses on the Old Chapel estate.

Plans passed by the SMETHWICK Corporation: Vicarage, Hales Lane, for the Bournville Village Trust; showroom, garages and four shops, St. Paul's Road, for Messrs. E. E. Brown & Co.; alterations, Paxton House, South Road, for the Smethwick Ex-Service Men's Club, Ltd.; offices, Bridge Street, for Messrs. Allen Everitt and Sons, Ltd.

The STOKE-ON-TRENT Corporation has obtained sanction to borrow £13,592 for the erection of shops and offices at the corner of Church Street and Lonsdale Street.

Plans passed by the STOKE-ON-TRENT Corporation: Four houses, Riseley Road, Hartshill, for Messrs. G. Evans and Sons; house, Stone Road, Trentham, for Mr. E. Kinson; six houses, Trafalgar Road, Hartshill, for Mr. J. H. Summerfield; eight houses, Cooper Street, High Lane, Burslem, for Mr. E. A. Bird; house, Victoria Road, Tunstall, for Mr. H. Shufflebotham; bungalow, Heathcote Street, Longton, for Mr. A. Perry; eleven hangars and clubhouse, Meir Aerodrome, Uttoxeter Road, for National Flying Services; house, Stone Road, Rough Close, for Mr. M. E. Valder; four houses, Broadway, Harpfields, for Mr. H. Cartledge; six houses, Trafalgar Road, Hartshill, for Mr. J. Dimbleby; five houses, Hilderstone Road, Meir, for Mr. E. W. Haynes; bungalow, Drubbery Lane, Blurton, for Mr. W. Colclough; alterations and additions to shop, Macclesfield Street, for Mr. E. Kent; eight houses, Milton Road, Sneyd Green, for Mr. B. S. Phillips; farm buildings, Stanfields, for Mr. J. Finney; alterations and additions, Piccadilly and Trinity Streets, for the manager of the Empire Cinema; two houses, King George Street, Hanley, for Mr. W. Sergeant; five houses, Sandon Road, Meir, for Mr. E. W. Haynes.

The Stoke-on-Trent Corporation is to erect 150 houses on land at High Lane, TUNSTALL.

The Stoke-on-Trent Corporation has passed plans for the proposed streets on land off King William Street, TUNSTALL, for the Chatterley-Whitfield Collieries, Ltd.

The WALSALL Corporation has purchased land at Harden Road for housing purposes.

NORTHERN COUNTIES

The BIRKENHEAD Corporation Markets Committee has approved plans of new weighing machine offices, proposed to be erected in Cleveland Street.

The BIRKENHEAD Education Committee has approved the amended plans for alterations at the Temple Road School, and has instructed the architect to invite tenders for the work.

Plans passed by the BIRKENHEAD Corporation: Two houses, Shrewsbury Road, north; extension to motor workshop, New Chester Road; store, Tapestry Works, Stanley Road; alterations and additions. "Kent House," Columbia Road; alterations, Park Cinema, Park Road; alterations, Queen's Cinema, Claughton Road.

The BIRKENHEAD Corporation Estates Committee has approved the layout scheme for the erection of houses on land forming part of the Orred estate, and has authorized the borough surveyor to proceed with the preparation of plans and estimates.

The BLYTH Corporation Housing Committee has authorized the borough engineer to prepare a plan of the Albion Brickyard site, showing proposals as to the utilization of the land.

The CHESTERFIELD Education Committee has passed preliminary plans for the reconstructions and additions to the following schools: Brushes school, £1,300; Central school, £1,741; Old Road mixed school, £2,995; and Old Road infant and junior school, £1,855.

Plans passed by the CHORLEY Corporation: House, Blackburn Road, for Mr. J. B. Walmsley; bungalow, Carr Lane, for Mr. Arthur Redhead; three houses, Blackburn Road, for Messrs. Barnes Bros.; hospital, Preston Road, for the trustees of Chorley hospital; new premises, Market Street, for Messrs. F. W. Woolworth & Co., Ltd.; extensions to mineral water factory, for Messrs. T. and R. Smith.

The West Riding Education Committee is to erect an elementary school for 200 children at EARBY, at a cost of £6,000.

The Board of Education has approved of the plans of the West Riding Education Committee, for the proposed new premises for the HARROGATE secondary school, at an estimated cost of £72,200.

The West Riding Education Committee has received sanction from the Board of Education for the erection of the proposed new secondary school at HONLEY, at an estimated cost of £37,900.

The West Riding Education Committee is to erect a new senior school at NORMANTON, to accommodate 530 children, at an estimated cost of £16,970 for buildings, etc., and £2,350 for furniture and equipment.

The West Riding Education Committee has passed revised sketch plans for extensions at PENISTONE Grammar School, which is to be erected at a cost of £24,350.

Plans passed by the ROTHERHAM Corporation: Alterations, 24 and 26 High Street, for Messrs. J. W. Muntus & Co.; extensions, 16 High Street, for Messrs. Montagu Burton, Ltd.; building, Fullerton Road, for Wagon Repairs, Ltd.

The West Riding Education Committee is to erect an elementary school at SKELMANTHORPE, to provide accommodation for 500 senior scholars, at a total estimated cost, including the erection of a caretaker's house and the layout of the playing-fields, of £24,500.

The TYNEMOUTH Corporation is to seek sanction to borrow £36,490 for the erection of the Linskill senior school.

Plans passed by the TYNEMOUTH Corporation: Four houses, The Broadway, St. George's Estate, for Mr. J. R. Wallace; six houses, Manor Estate, for Messrs. G. Park and Son, Ltd.; twenty-four houses, Manor Estate, for Messrs. H. D. Burton, Ltd.; two houses, The Broadway, for Mr. W. Stockdale; four houses, Ashleigh Grove, for Mr. A. K. Tasker; additions, Bay Hotel, Hudleston Street, Cullercoats, for Mr. S. H. Lawson; two houses, Dene Road, for Mr. D. J. Stephenson; two houses, Ashleigh Grove, for Mr. W. Bower; school, Keilder Terrace, for the Education Committee; additions, New Dolphin Inn, Low Lights, for the Newcastle Breweries, Ltd.

Extensions are to be made at the WOODHOUSE secondary school, for the West Riding Education Committee, at an estimated cost of £6,750.

WALES

Plans passed by the MERTHYR Corporation: Alterations and additions, Peter Pan Restaurant and shops, High Street, for Messrs. John Evans, Ltd.; additions, St. Matthias's Church, Treharris, for the churchwardens; extension of printing room, "Express" office, for Messrs. H. W. Southey and Sons.

Subject to certain modifications and improvements, Messrs. Jones and Thomas, architects, are to proceed with the preparation of working drawings of the first portion of the proposed civic buildings at SWANSEA.

SCOTLAND

The following figures show the progress that has been made in State-aided housing schemes in Scotland to February 28, 1930: 1919 Act, by local authorities, 25,129: 1919 Act, by public utility societies, 421; private subsidy schemes, 1919 Additional Powers Act, 2,324; slum clearance schemes, 11,205; under consideration, 2,135: 1923 Act, by local authorities, 4,028; under construction, 2: 1923 Act, by private enterprise, 17,724; under construction, 1,375: 1923 Act, by public utility societies, 80: 1924 Act, by local authorities, 42,413; under construction, 5,132: 1924 Act, by private enterprise, 1,431; under construction, 1,507: 1924 Act, by public utility societies, 127; demonstration houses, 17; steel houses erected on behalf of Government by Scottish National Housing Company, 2,552. Total completed, 107,451; total under construction, 10,151. Complete total, 117,602.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
*	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_3	Gosport ..	S. Counties	1 5½	1 1
A_3	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_3	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_3	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_3	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_3	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_3	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_3	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_3	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_3	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_3	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_3	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0
Screened ballast or gravel, add 10 per cent. per yd.			
Clinker, breeze, etc., prices according to locality.			
Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0

Exceeding 6 ft., but under 12 ft., add 30 per cent.

In stiff clay, add 30 per cent.

In underpinning, add 100 per cent.

In rock, including blasting, add 225 per cent.

If basketed out, add 80 per cent. to 150 per cent.

Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
If left in, add to above prices, per ft. cube	0	2	6
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.

Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0
Add to the foregoing prices, if in York stone, 35 per cent.			
DO. Mansfield, 12½ per cent.			
Deduct for Bath, 33⅓ per cent.			
DO. for Chilmark, 5 per cent.			
SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6	7 0
Grey-green do.	5	9 0
Green peggies, 12 in. to 8 in. long	4	13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	8
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1½ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1⅛ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1⅛ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1⅛ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1⅛ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT raups, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅜ in., per ft.	0	0	6½
DO. *½ in., per ft.*	0	0	6¾
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

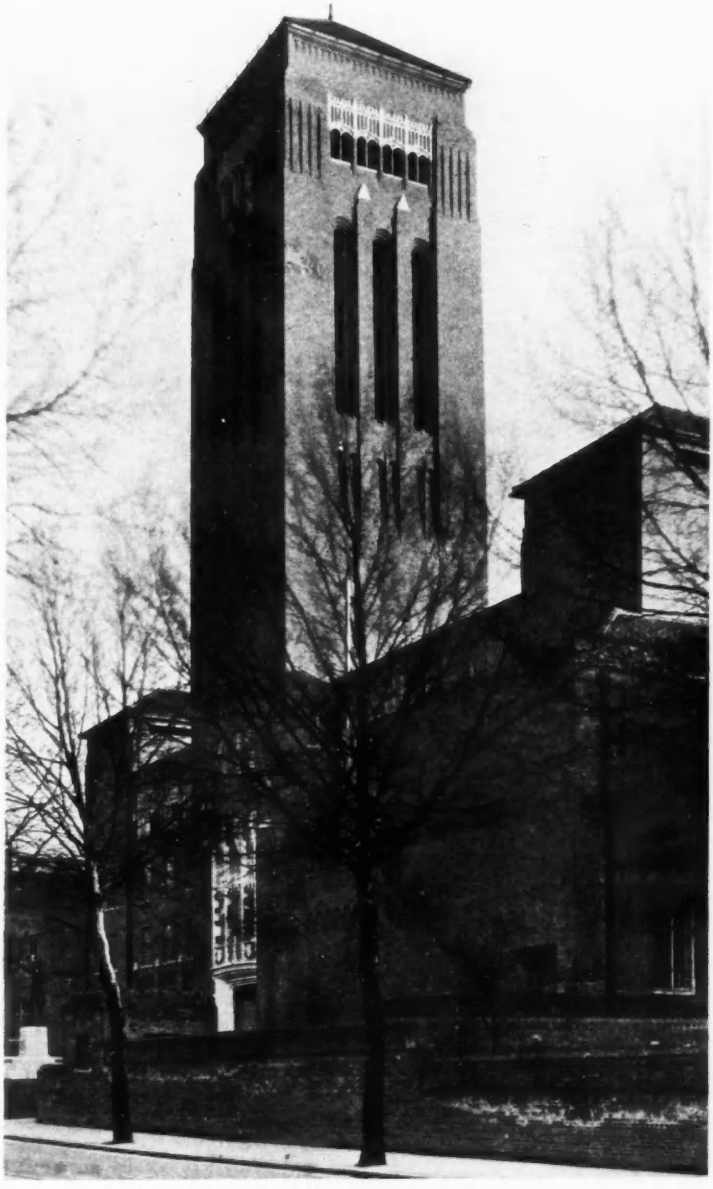
SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, 5/32 in., grey flat per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ¼ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			¾ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	5½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

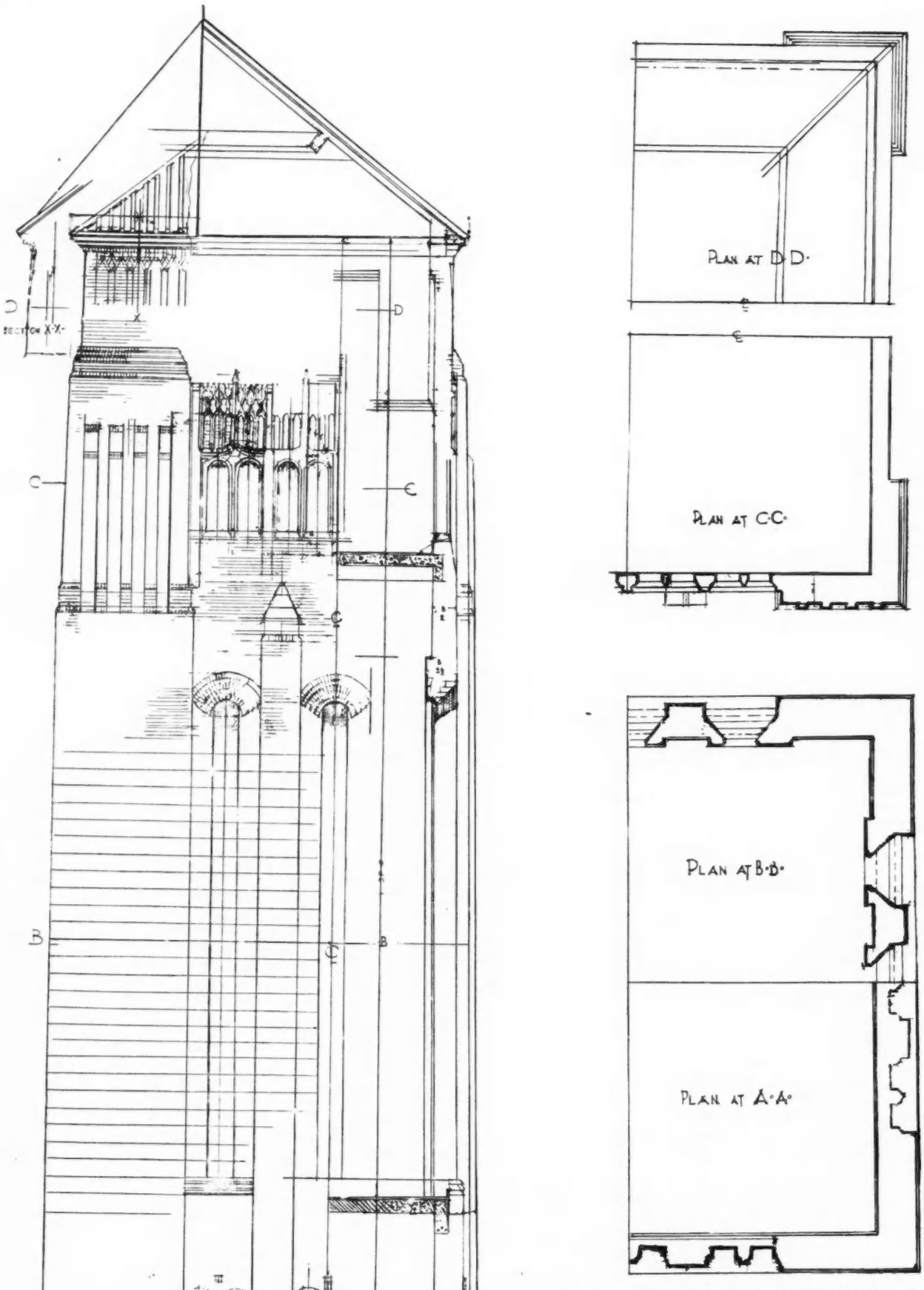


THE TOWER, WILLIAM BOOTH MEMORIAL BUILDINGS, DENMARK HILL, S.E.

By

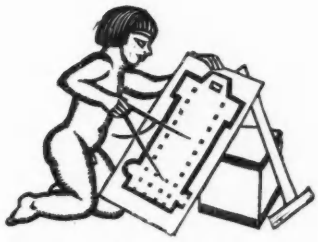
GORDON & VINER, AND SIR GILES GILBERT SCOTT,
Associated Architects.

THIS tower rises to a height of 200 ft. It faces a railway embankment and stands on a site with a treacherous subsoil of clay, which made it necessary to sink the foundations to a depth of about 40 ft. On the following page is reproduced the architects' original half-inch detail drawing, now much the worse for wear, the entire work having been executed from it. Beneath the tower is an entrance hall designed virtually as a memorial hall.



Detail of upper part of Tower, William Booth Memorial Buildings, Denmark Hill, S.E. By Gordon and Viner and Sir Giles Gilbert Scott, associated architects.

(*For photograph see previous page.*)



WEDNESDAY, APRIL 9, 1930

IDEAL HOME ARCHITECTURE

" *This is the house* The Mail *built.*"
. . . . . .
In fact :—
" *This is the man, not looking too worn,*
Who pets the missus, by no means forlorn,
Who pays the maid
That tends the gadgets that lighten the morn
In the rooms
Within the beams that adorn
The house The Mail *built.*"

—but what about a whole village of them?

FOR many years *The Daily Mail* Ideal Home Exhibition has attracted an enormous number of visitors whose architectural taste, in many instances, as far as housing is concerned, has actually been formed by the exhibits. One is paying no compliment to the organizers of the Exhibition in affirming the obvious truth that it is their desire to guide architectural taste. If the Ideal Home Exhibition were frankly a commercial venture and nothing more, it would be wrong to apply to it a strict æsthetic standard. As the organizers, however, are distinguished by the public spirit which causes them to approach their task in what might almost be described as a missionary zeal, the Exhibition must be regarded as possessing the same status as that of any other exhibition showing the products of the visual arts, and therefore deserves not only the type of encomium which may be read in the advertisements of the objects displayed, but respectful and serious criticism.

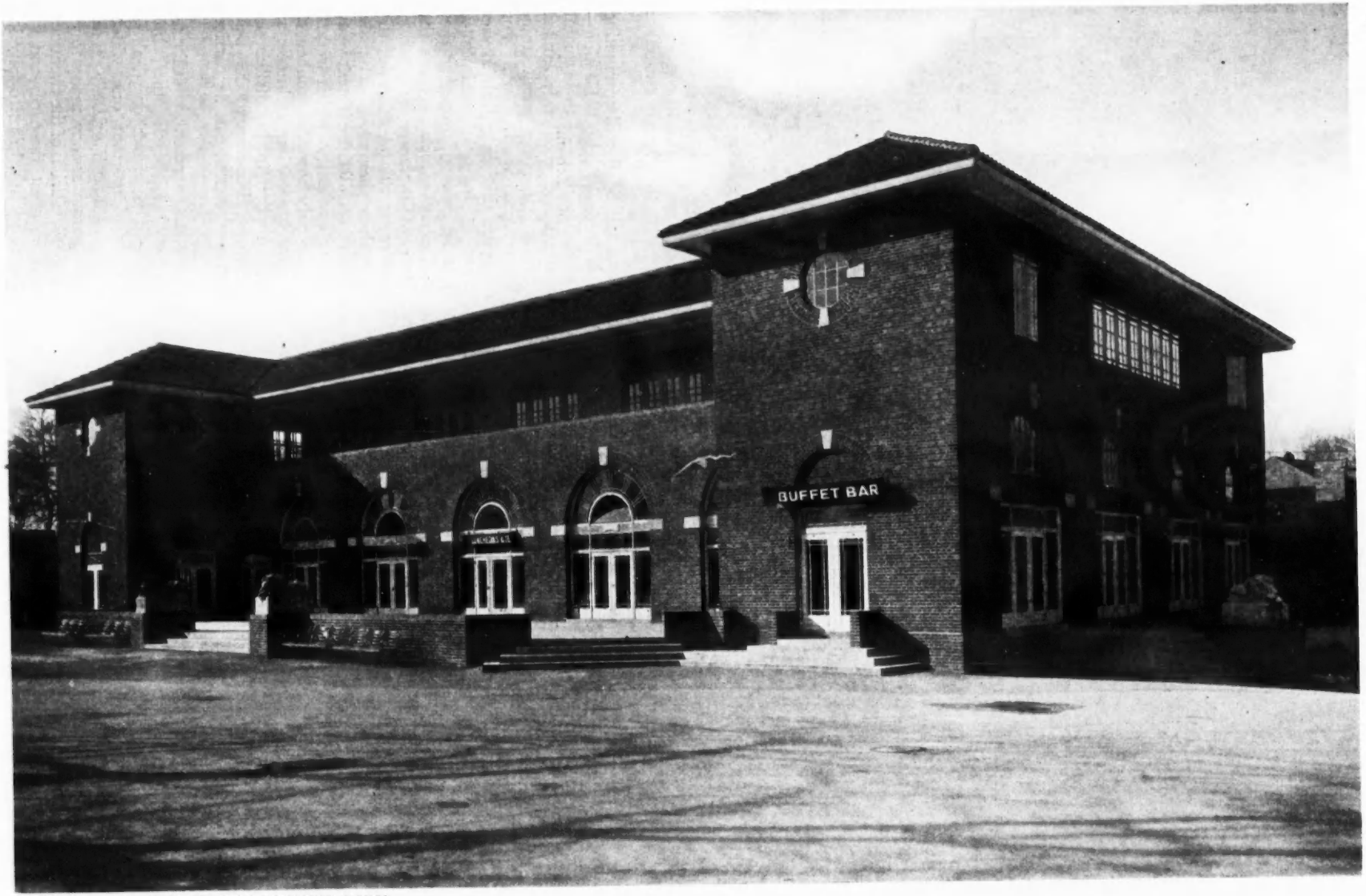
The domestic architect must welcome cordially the numerous labour-saving devices of which every year brings forth a new crop ; and even if at the present moment he is a little worried because, half-way through the jobs, clients are insisting upon the insertion of some artifice just seen at *The Daily Mail* Ideal Home Exhibition, he bears it no grudge on this account. But what will an architect say to a building owner who has invited him to lay out an estate and erect upon it thirty or more houses disposed in the manner which we see exemplified in some charming little models at Olympia—a number of semi-detached houses all exactly alike ? Or again, will he be pleased or, what is more, will the Council for the Protection of Rural England be pleased, if he is invited to build somewhere on the Sussex Downs or, in fact, in any part of England where the scenery is still unspoilt, a number of houses exhibiting such a variety of material, style and contour as we see in the Ideal Village at Olympia?

In asking these questions we do not wish to be misunderstood. The houses in question are admirably built, and their materials have all the good qualities which are claimed for them. We may even go further and say that they are also of attractive design, when considered individually. It is only their juxtaposition which causes us distress, dismay and other feelings of spiritual discomfort. Yet architects of today must learn how to design houses fit to be seen in congregation, unless it is to be said of us that we are altogether lacking in the civic sense.

It can scarcely be questioned by the discriminating observer that *The Daily Mail* Ideal Home Exhibition—which has shown the public so many of these quaint little houses, economical to construct, excellently planned and well built—has, while improving architectural tastes in some respects, corrupted it in others. For we have been led to suppose that these little houses represented the last word in domestic architecture, whereas, unfortunately, they ignored altogether that most important aspect of design which concerns the harmonious inter-relationship of houses on an estate.

May we suggest, therefore, to the organizers of the Exhibition that they may show themselves to be still more enlightened patrons of architecture if next year, in addition to the attractive features to which we are accustomed, they will not only show a number of full-sized cottages forming an harmonious architectural ensemble, but will also display to us models in miniature of housing groups, illustrating the best manner in which estate development can be carried out.

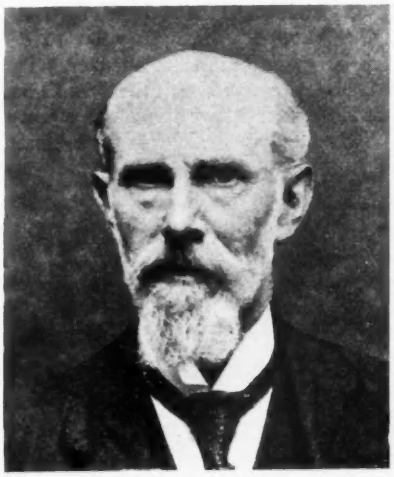
The problem of how to harmonize different architectural units not only with each other, but with their setting, whether it be urban or rural, is without exception the most important one which architects have to consider. Let *The Daily Mail*, then, a paper by whose vigorous agency many fresh amenities have been secured for citizens of the twentieth century, employ some of its great resources and its genius for propaganda in order to help us to solve it.



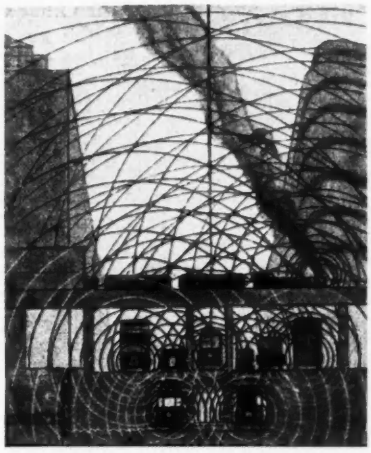
A NEW RENDEZVOUS AT REGENT'S PARK:
THE RESTAURANT IN THE ZOOLOGICAL GARDENS.

Designed by J. J. Joass, this building has been erected on one side of what is intended to be a vast octagonal place or terrace, with the Elephant Drive connecting it with the Lion House, etc. Accommodation is provided, separately, for Fellows of the Zoological Society and for the general public; 650 persons can be served, and facilities are provided for the serving of meals in the open, and upon the spacious first-floor balcony. A further photograph, plans and description, appear on pages 565–8.

NEWS & TOPICS



W. Reynolds-Stephens, elected President of the Royal Society of British Sculptors. This is the tenth term during which he has occupied the presidency.



Noise centres in a modern city.



J. Hubert Worthington, O.B.E., M.A., A.R.I.B.A., who delivered a lecture on "Antonio da San Gallo the Younger," at the R.I.B.A. on Monday.

SLUM CLEARANCE

THE Slum Clearance Bill, as was foreshadowed, delivers a frontal attack on the problem, and divides itself naturally to apply to three main categories—areas where conditions imply absolute clearance; improvement areas, which are semi-slum areas on the downward path; and individual houses in need of repair or demolition. Of the two methods of clearing an area, it is worth noting that one is new. It requires the *owner* to demolish the buildings. If the owner does not carry out the order to demolish, the authority may themselves do so and recover the cost from the owner. Furthermore, the provision of new houses for tenants displaced by demolition or improvement is to be considered essential. As to the demolition of individual houses, the Bill provides that appeals shall be made to the County Court instead of to the Minister of Health. Part 3 lays it down that every borough or urban district with a population of 20,000 shall submit a programme of housing work to the Minister in 1930 and every fifth year thereafter.

*

The financial provisions abolish the present 50 per cent. grant and replace it with an annual grant on the unit basis. This grant is based on the number of persons displaced for whom accommodation in new houses provided by the local authority is made available, and will be paid annually for forty years. The normal grant is 45 shillings a year, with 50 shillings in rural areas. It may be increased to 70 shillings in exceptional circumstances. The cost of this Bill has not been estimated, although it has been noted that if 100,000 persons are displaced each year, of whom 20,000 are rehoused in tenement buildings, the annual Exchequer grant would amount to a quarter of a million pounds. Let us hope that the results secured will be commensurate with the expenditure.

TOWARDS THE NOISELESS CITY

The German weekly, *Die Woche*, has recently published an article on the scientific study of the problem of street noises, reinforcing its arguments with the illustration shown above. The authors, Otto Kappelmayer and A. B. Henninger, state that the roar of great cities has already such a disastrous effect on the nervous systems of their inhabitants that its amelioration is bound to become as much a matter for public health authorities as sanitation and slum-clearance. As with most other evils, there are in theory two ways of dealing with this civic disorder: prevention and cure. Police regulations making a silencer a compulsory part of the equipment of every motor car and (more particularly) motor cycle are advocated by those who believe that the elimination of noise can be achieved by attacking it at source. Less optimistic reformers consider that the most hopeful remedy is to insist on road-engineers and town-planners constructing streets in such a manner and of such materials as will curtail the reverberative zones emanating from their surfaces and the yet more sensitive microphones of the hollow vaults beneath them. In this way the inevitable modicum of screeching and rattling could be made more approximate to that ideal "sinus line" of sound-convolutions which the study of acoustics has shown represents the sort of noise least unendurable to the human ear.

*

The perfect sounding-board for pandemonium, according to these experts, is a straight and busy city street, enclosed within continuous walls of lofty modern buildings of a uniform height. Should this street be laid with tram-lines, surfaced with asphalt and honeycombed by pipe subways and tube railways, its original tuning-fork potentialities will be magnified several hundredfold. If, however, the tram-rails are separated from the asphalt by a double row of wooden blocks, and this asphalt surfacing is interrupted every ten yards or so by strips of wood paving, or some other equally porous insulation, the reverberation can be very considerably reduced. The noiseless street, on the other hand, is typified by one of those wood-paved, canal-side streets of Amsterdam, which are flanked to landward by old, narrow-fronted, brick houses of very irregular elevation. The fact that so many modern city buildings are steel and concrete structures, faced with large slabs of smooth impermeable materials, enormously increases their resonance; whereas a rough and evenly divided

surface tends largely to diminish it. Yet every year more London streets—and London was till lately, except in Holborn, a predominantly wood-paved city—are being relaid with asphalt, which will vastly augment the already intolerable din, while offering hardly any better resistance to erosion.

FLAT ROOFS INSTEAD OF GARRETS

Sir Arbuthnot Lane in a recent interview stressed the need for flat roofs, sun porches, and any other means whereby the occupants of the buildings to be erected under the Slum Clearance Act may enjoy the health-giving properties of sunlight. He is surely right, for if we are to put any trust in the future we must count upon cleaner air and more good sunshine, which to waste by building houses with unusable roofs shows a lack of forethought and proper care for the health of the people.

★

Quite apart from this practical side, the prospect of flat-roofed tenements and flats opens up a vista of terraced architecture possessing unbounded possibilities when once the problem of the chimney is successfully solved.

★

I think it should be realized that the roof, though considered by most architects to be an essential characteristic of any building bearing our national stamp, can be a serious hindrance to the flexibility of designing in large units. Also, the tenants of these buildings object to the height when it lands them near the traditionally despised roof, with all its associations of attics and garrets, whereas to be near the flat-roof playground and drying ground would provide a strong inducement to live high, and would make certain that the children of the upper floors got enough exercise and plenty of sun.

WHOSE SMOKE IS THAT ?

A rather amusing situation has arisen at Washington, U.S.A., where, in the course of a campaign against the smoke nuisance, a warrant has been served against the architect of the State Capitol, and through him to the Speaker of the House. Nobody knows quite what to do, because you can't serve warrants against the Speaker. The Health Officer, who has already had both the Post Office and the Office of Printing convicted for the same offence, is not the man to be troubled by little legal problems. Somebody will have to sit on the fire.

★

I wish we had a man like him in London, for I would take him to Whitehall on a fine frosty morning and show him the cloud of smoke that issues from the innumerable chimneys of Government offices, just as if there were no such thing as central heating.

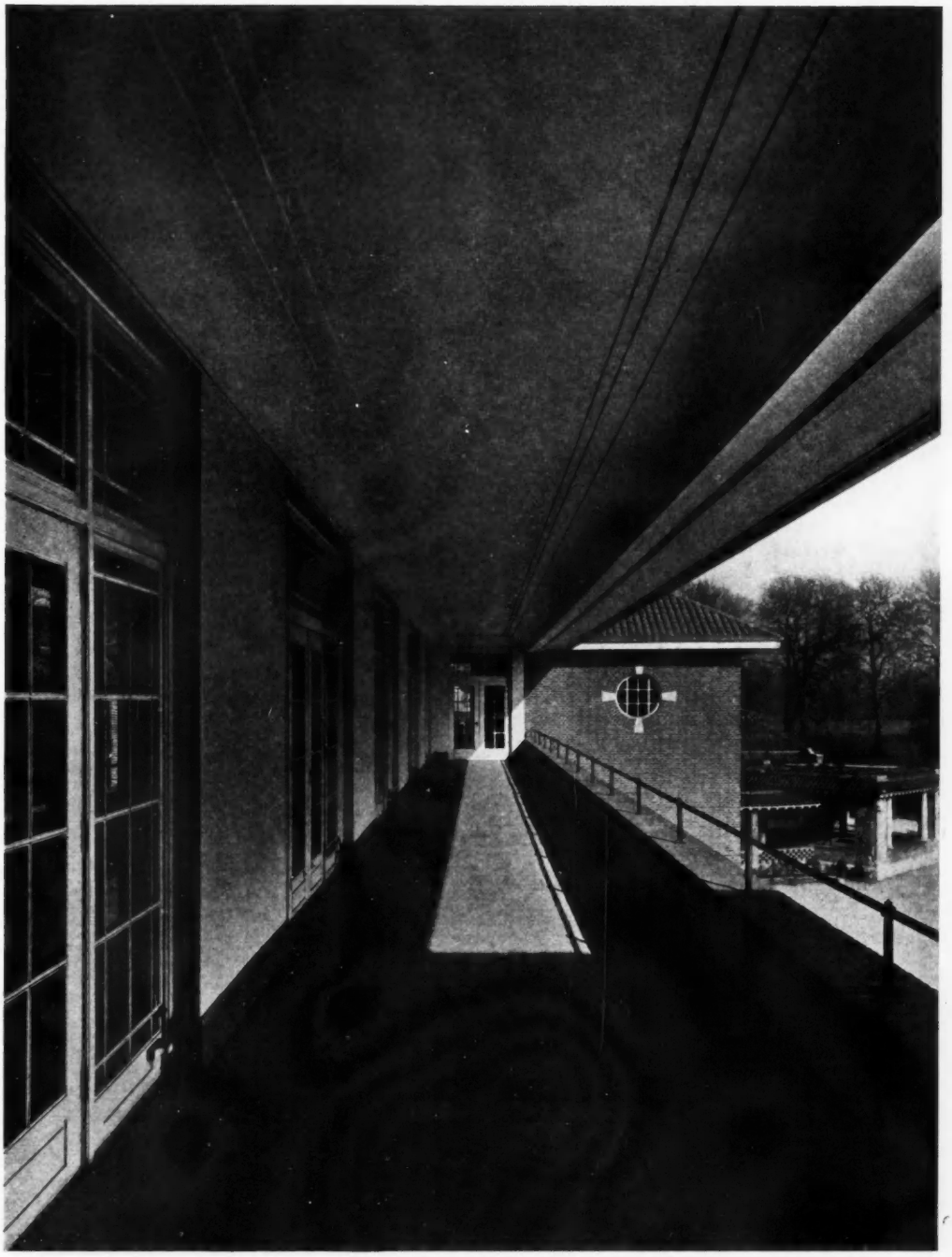
THE ARTIST AND THE SHOP FITTER

The day when architect and painter will combine to find the right spaces for mural decoration is arriving. An instance is to be seen in the new red lacquer room at Austin Reed's premises in Regent Street, opened by Sir Alan Cobham on Wednesday last. This room, which is panelled in red and black lacquer, has been designed by P. J. Westwood and is intended for the sale of tropical outfits; the idea being to make the buyer feel hot as he examines the cool clothing and sun helmets. On entering the room at the opening ceremony I was impressed with the unique decorative scheme which captures so much of the charm of an Eastern setting. Much of this effect is due to the series of mural paintings, by Fred Taylor, forming a frieze around the room and representing scenes in many parts of our tropics—war canoes of the Solomon islanders, Maoris at a woodland shrine, a fruit market in one of the isles of the West Indies—brilliantly coloured, with scarlet predominant. The scenes I have mentioned can be seen, in their respective order, in the photograph reproduced on this page. The whole of the paintings are cleverly illuminated by lights recessed in the ceiling about two feet from the walls. These paintings are, I believe, a new departure for Mr. Taylor, and I feel they comprise his best effort in oil colours.

ASTRAGAL



Part of the red lacquer room at Austin Reed's, designed by P. J. Westwood. Mural paintings of tropical scenes, by Fred Taylor, form the frieze.



A view looking along the whole length of the first-floor balcony, which overlooks the terrace, gardens and bandstand. The near end is to be reserved for Fellows ; the further is to be for public use.

NEW RESTAURANT AT THE ZOO

DESIGNED BY J. J. JOASS

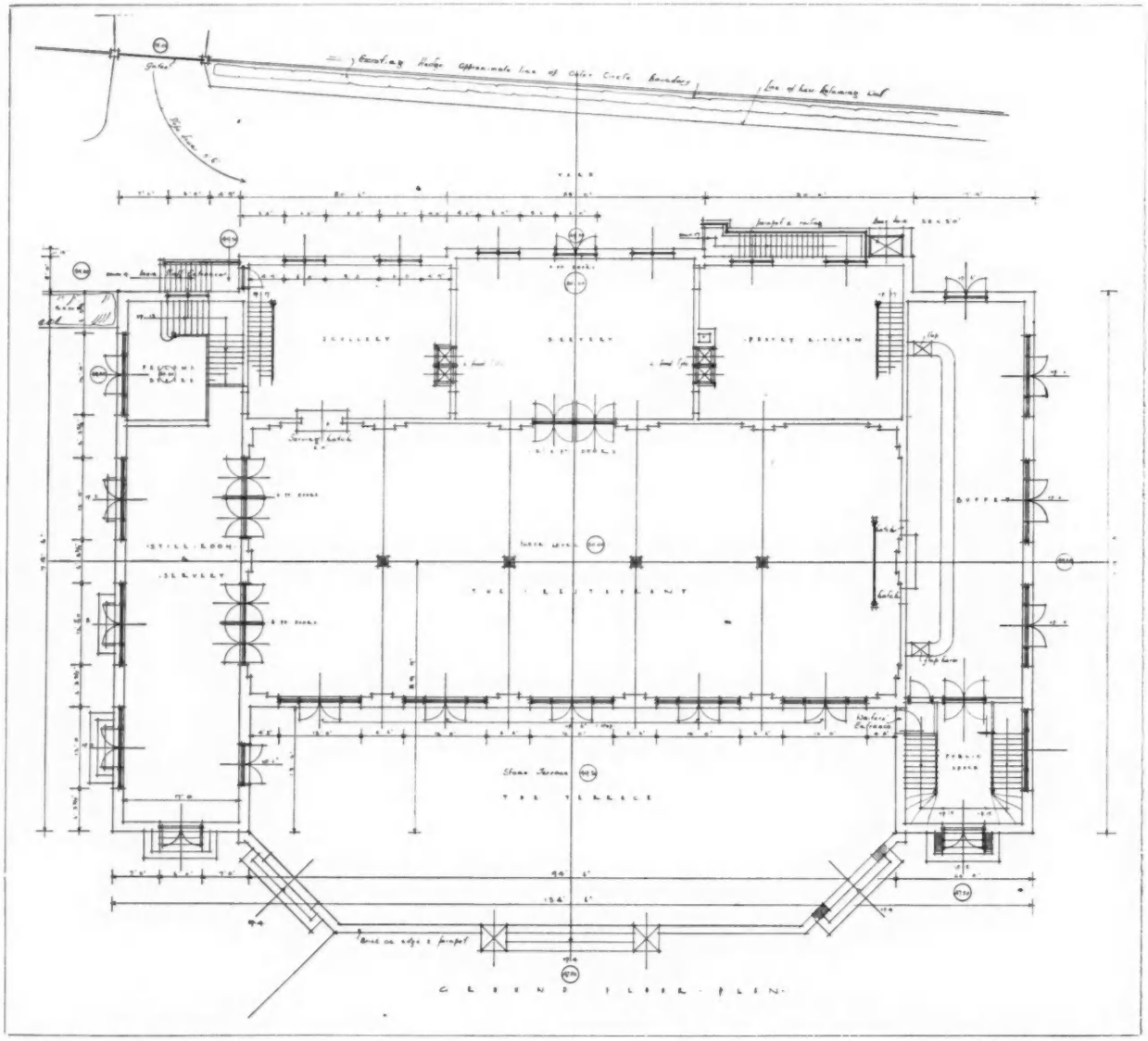
EVIDENCE of the progressive spirit that animates the Zoological Society of London has been given on several occasions in this JOURNAL during the past few years. The policy that has resulted in the formation of the Mappin terraces, the new aquarium, new entrance buildings and reptile house is reflected in the attention given to the famous Gardens at Regent's Park as gardens, apart from their function of giving house-room to the animals. Few lawns and flower-beds in the metropolis present a more pleasant spectacle during the summer months.

The building, of which photographs and plans are now reproduced, is the

latest to take its place in a scheme of layout that has in contemplation the creation of a vast octagonal place, from which the Elephant Drive leads to the Lion House, etc. In meeting the need for a modern first-class restaurant to cater both for the public and the Society's Fellows, the block expressly designed to supply these essential services has been placed at an angle of 45 degrees with the tea-room, on the other side of which a similar block is intended to form in due course another side of the octagon.

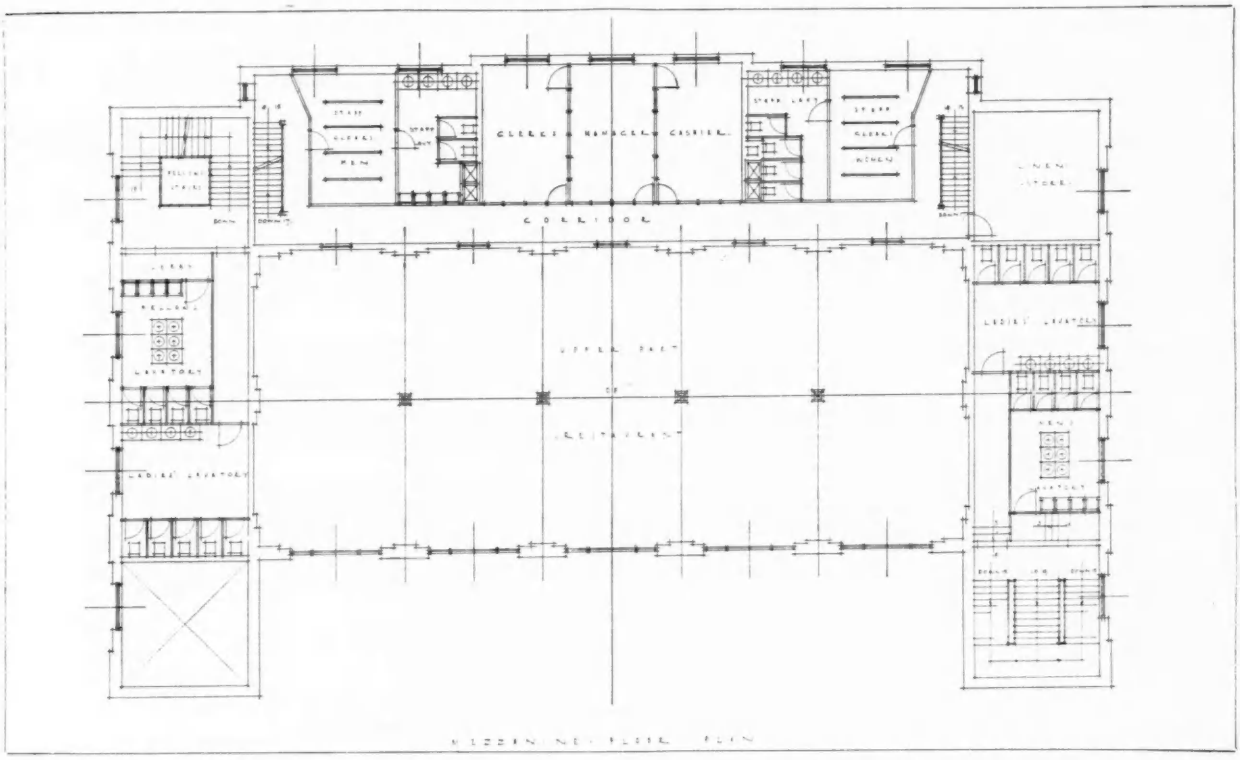
Erected upon a framework of steel, the new restaurant is faced with bricks, set off with keystones and voussoirs to the arched and circular window-openings of artificial stone, and has a deeply-eaved roof of special tiles; metal casements are employed. It is planned on two floors, with an intervening mezzanine, through which extends the large, and therefore lofty, public restaurant, some 96 ft. by 40 ft., occupying the central space on the ground floor. Its windows look out on to the extensive terrace that fronts the building, and the possibility of serving meals in the open air is aided by a service-room specially allocated to this purpose. The remainder of the frontage is occupied by a spacious entrance hall and a buffet bar. The kitchens, which are fitted in the most modern manner and are operated entirely by electricity, are behind and serve not only the ground floor but the first floor restaurants, special food lifts being provided.

A balcony overlooking the terrace, gardens and bandstand, and extending the length of the front between the paired end-blocks, is a feature of the first floor. A section of this is reserved for Fellows, as part of their separate accommodation, including lavatories, dressing-rooms, etc., with their own private staircase; the remainder is for public use. The same holds good of the restaurant within, which can be divided into three apartments by means of collapsible partitions; the public room here is about 56 ft. by 30 ft. In all, about 10,000 square feet are available for restaurant purposes, giving accommodation for 650 people.

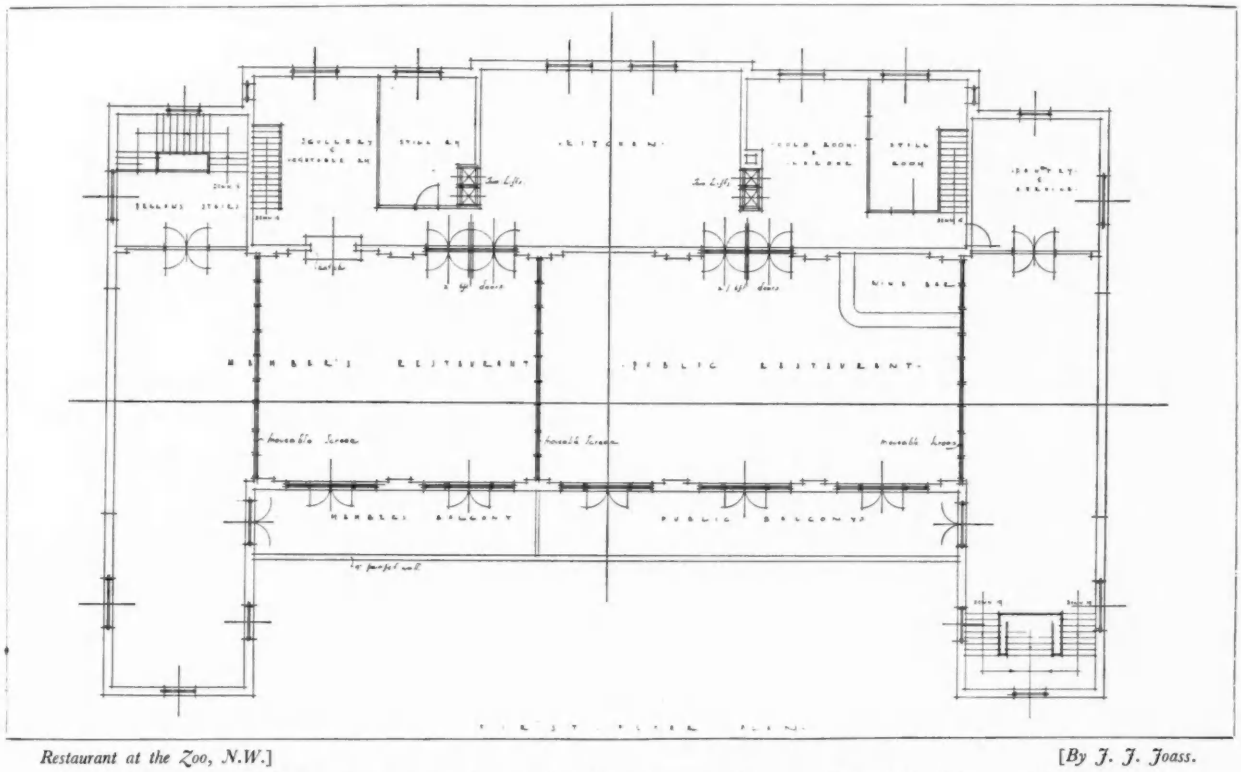


Restaurant at the Zoo, N.W.] [*By J. J. Joass.*

The architect's drawing of the ground-floor plan, showing the kitchens, immediately behind and adjoining the main public restaurant. On the right is the entrance hall and a spacious buffet bar. The building faces a stone-paved terrace.



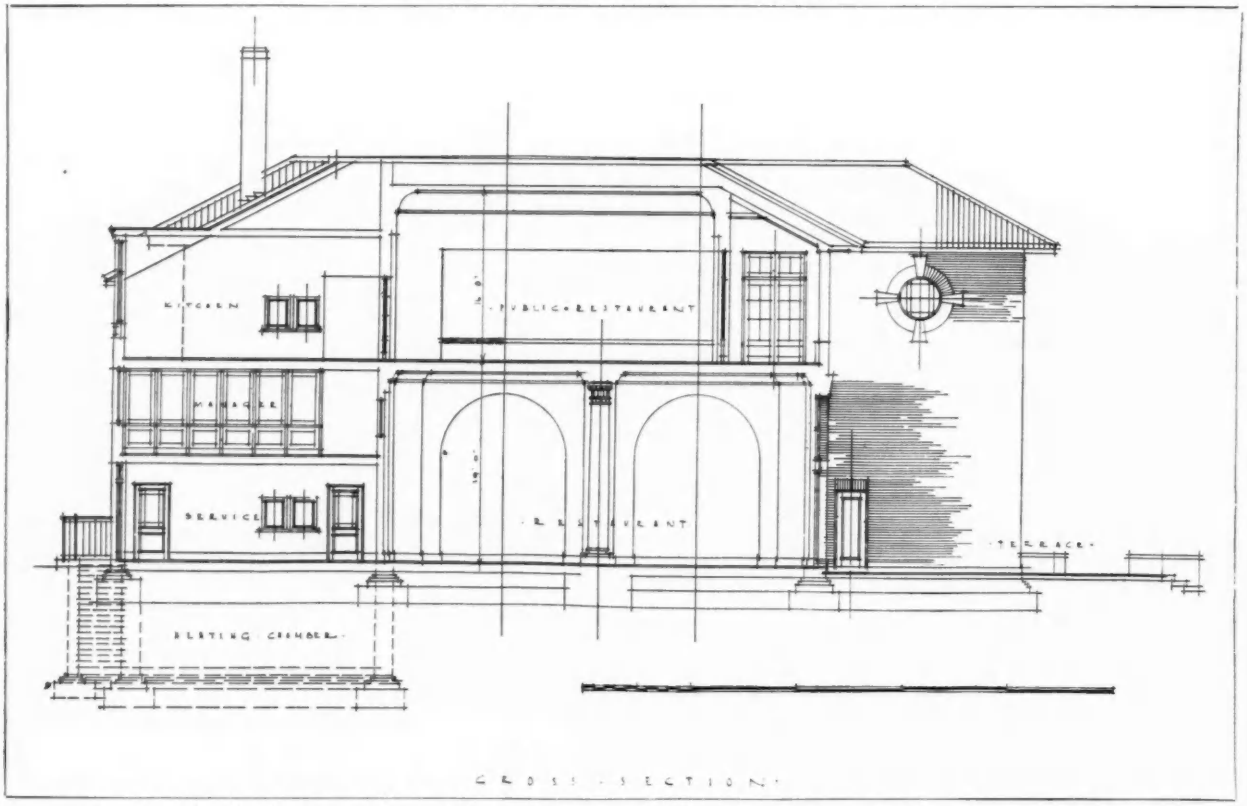
The plan at mezzanine level shows the public restaurant carried up through it from the ground floor, and the remainder of the space devoted to various essential offices. The scale of the two drawings on this page is the same as that of the dimensioned ground plan.



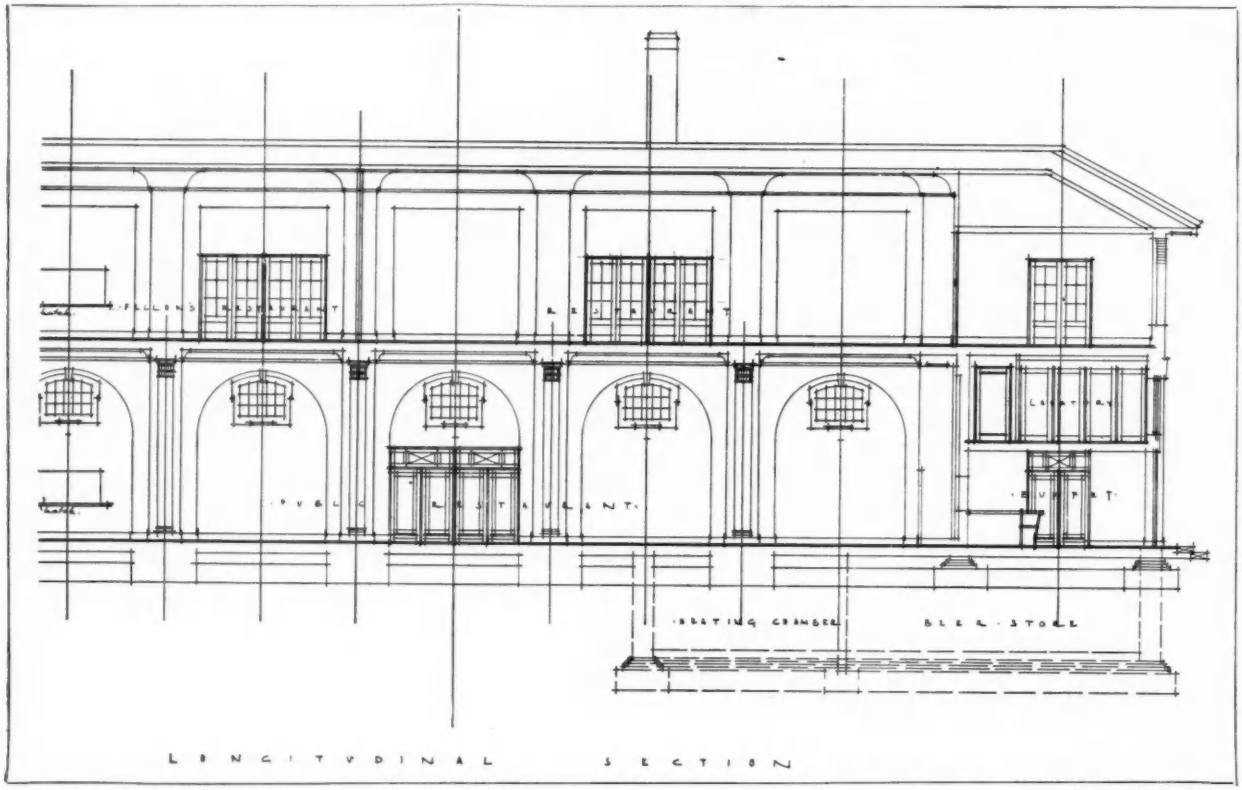
Restaurant at the Zoo, N.W.] [*By J. J. Joass.*

On the first floor are the Fellows' restaurant and a second public restaurant, with removable partitions between. On this floor also is the balcony, similarly divided between Fellows and the public. The Fellows' quarters have their private stairs and retiring rooms.

C



This cross section, looking towards the end block containing the public entrance hall, indicates the loftiness of both the main restaurants, and the convenient planning of the service quarters adjacent to them on each floor.



Restaurant at the Zoo, N.W.] [*By J. J. Joass.*

A portion of the longitudinal section taken through the restaurant halls and looking towards the kitchen and service quarters, with which communication is afforded through the doors shown on both the main floors.

SWIMMING BATH AT STOKE NEWINGTON

DESIGNED IN REINFORCED CONCRETE BY HOBDEN AND PORRI



The Clissold Road brick front of the new swimming bath, to be opened by H.R.H. Prince George tomorrow, April 10. The elevations have been specially designed to harmonize with the surrounding buildings, particularly the old houses in Church Street. Surmounting the main entrance is the borough coat-of-arms. The building will be floodlit from the lamp standards seen.

TOMORROW, April 10, H.R.H. Prince George will open the new swimming bath which has been erected in Clissold Road for the Stoke Newington Borough Council. The main front of the building is designed in a free interpretation of the Georgian style, and is faced with red bricks and Portland stone. Surmounting the main entrance is the Borough coat-of-arms.

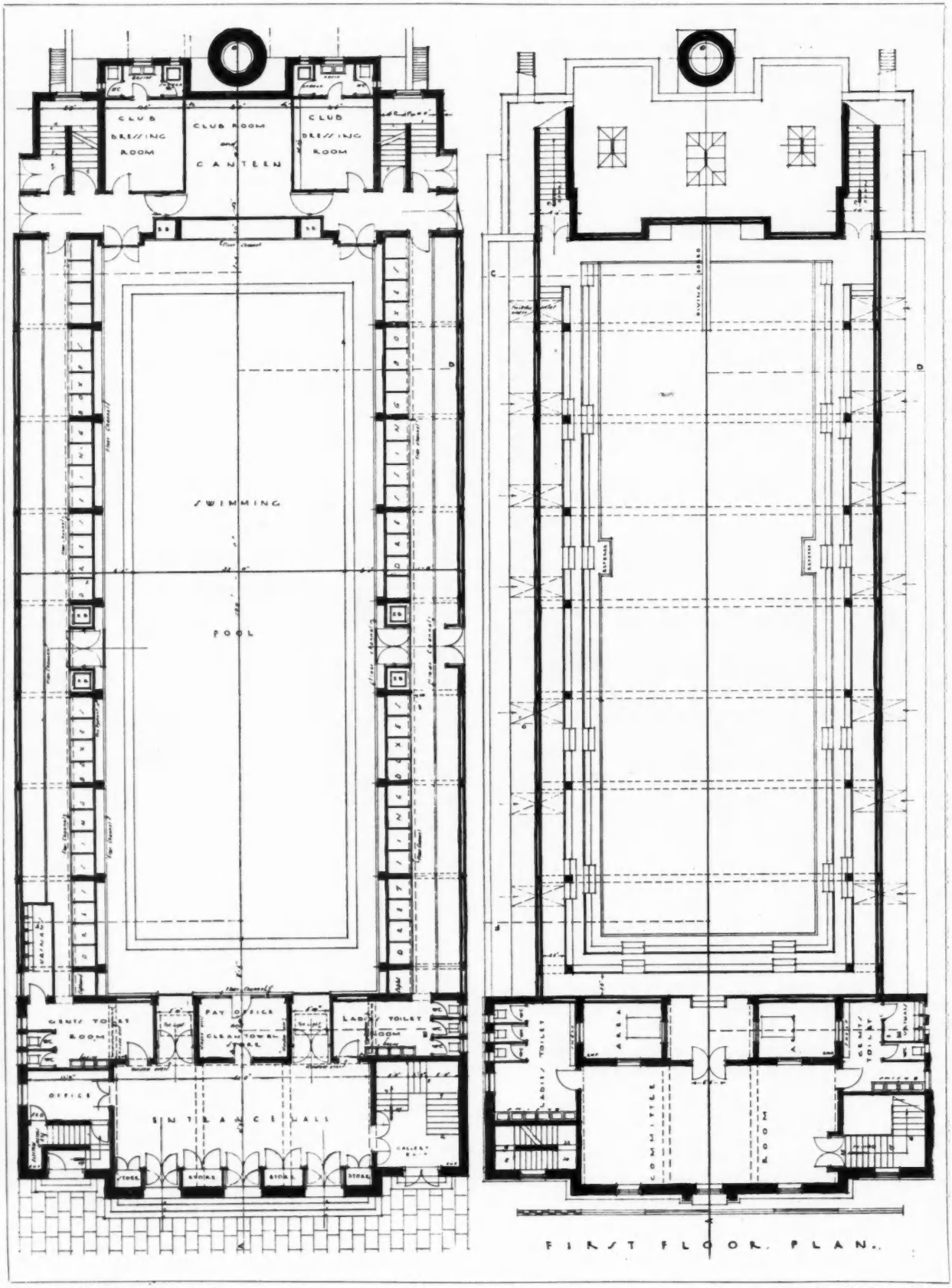
Important features of the planning are the placing of the dressing boxes outside the bath hall and the position given to the shower baths. No bather will be allowed access to the bath hall until unrobed, thus eliminating the danger, from a medical point of view, of outside dirt being brought in. In other respects the building conforms with the latest expressed opinion of medical experts in relation to buildings of this kind.

The swimming bath contains 127,000 gallons of water, which is completely circulated through the purification plant once every four hours at the rate of 31,750 gallons per hour. This is equivalent to filling the bath with fresh pure water three times daily. The water is drawn from the deep end through an outlet box, covered with a brass grating, and is connected by piping to electrically driven centrifugal pumps, which circulate the water through the purification system.

The water on delivery from the pumps is treated with sulphate of alumina and soda ash and is delivered into three air-cleansed pressure filters having a total filtration area of 170 square feet, operating at the filtration speed of 186 gallons per square foot per hour.

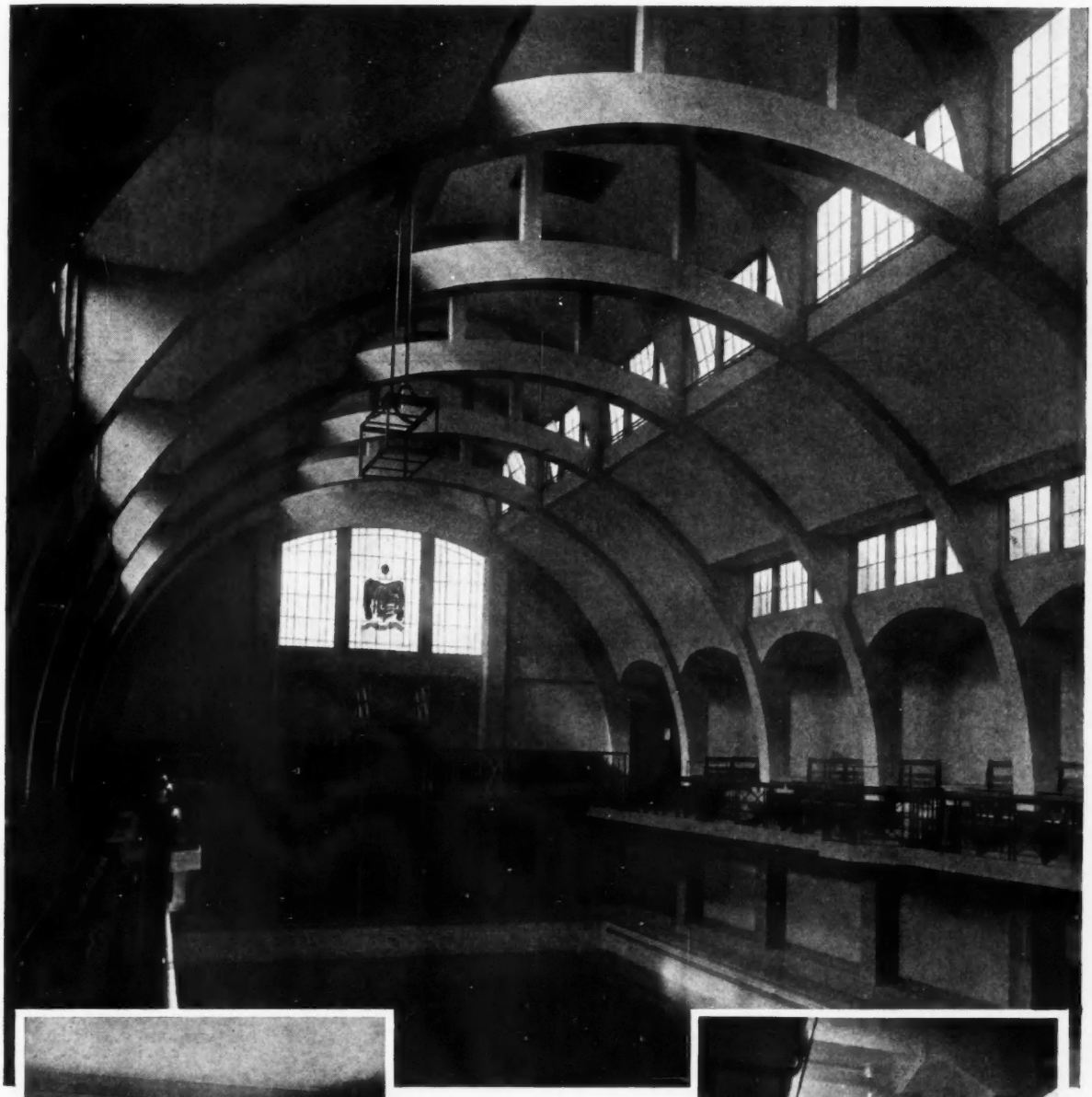
On leaving the filters the water is reheated to a temperature of about 74 degrees by passing through a tubular calorifier, and is then reoxygenated by contact with compressed air in an enclosed type aerator. Bacteriological purification is ensured by the application of a minute trace of chlorine gas, measured and continuously administered by a swimming-bath type chloronome.

The filtered and sterilized water is piped to the shallow end of the bath, where it is introduced at four points; and to ensure efficient distribution of water further inlets are provided on each side of the bath.



Swimming Bath, Stoke Newington.] [*By Hobden and Porri.*

Ground- and first-floor plans. The bath hall can seat 1,000 persons on the ground floor, and 250 in the gallery. When the building is being used as a swimming bath, the sole entry to the bath hall is by means of the toilet rooms and dressing-box corridors. Direct access from the entrance hall is provided for gala performances and when the hall is used for concerts, dances and cinema shows.





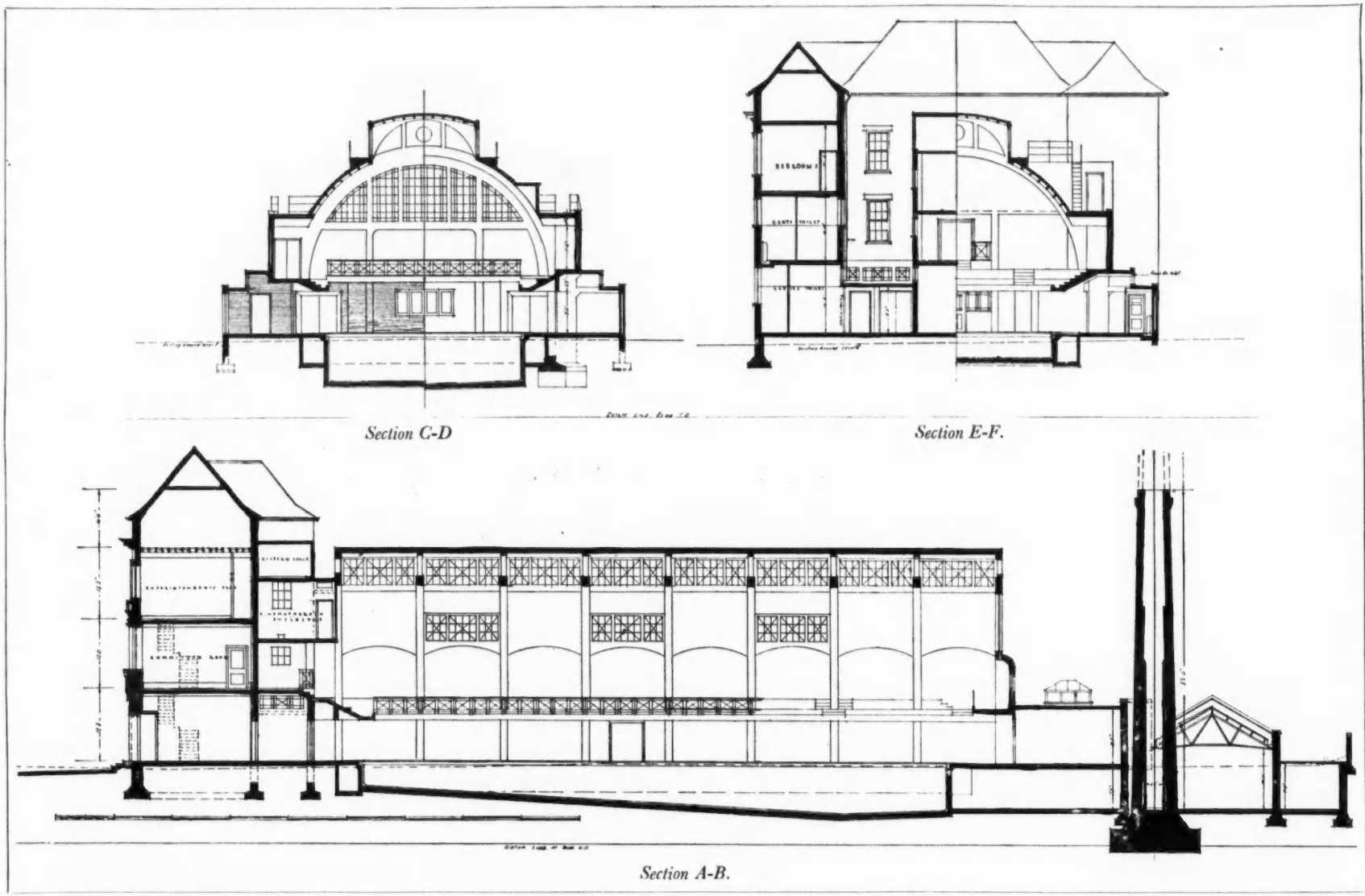
The bath hall is of reinforced concrete, rubbed, and coloured with distemper. The swimming pool is faced with white and blue glazed blocks, and the walls of the bath hall below the gallery with terrazzo. The promenade round the bath is of vitrified glass cubes.

SWIMMING BATH, STOKE NEWINGTON

By HOBDEN AND PORRI

A corner of the committee room on the first floor; and a part of a dressing-box corridor, showing the changing boxes, entrance to bath hall, and shower and foot baths.





Section C-D

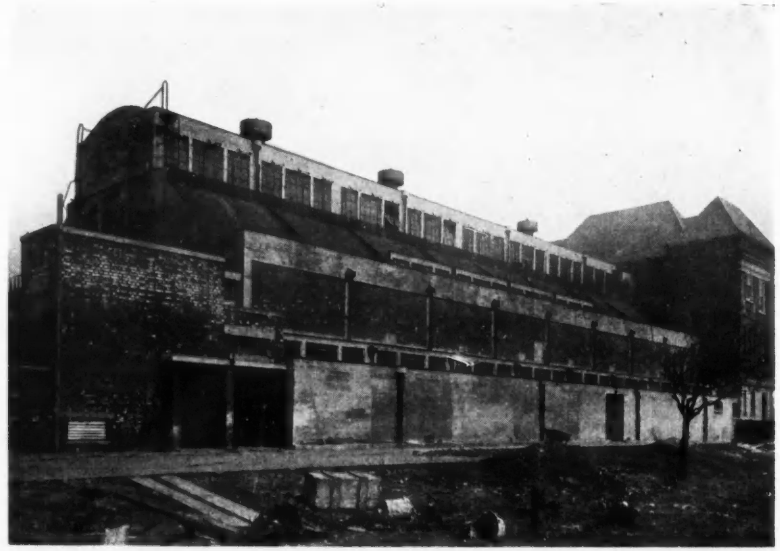
Section E-F.

Section A-B.

Swimming Bath, Stoke Newington.] *[By Hobden and Porri.*

The architects' drawings of the cross and longitudinal sections. The bath hall is 120 ft. long by 45 ft. wide, and the swimming pool 100 ft. by 33 ft. The depth of water at the diving-board end is 8 ft. and at the shallow end 3 ft. On either side of the bath hall are spacious corridors in which are placed the dressing boxes and shower baths. Club rooms, a room suitable for canteen purposes, and an operator's box and re-winding room for cinematograph shows, are provided.







Two views (left and right) of a gallery corridor showing the springing of the main arch ribs before and after being encased in concrete. Centre: the south side of the bath hall.





Swimming Bath, Stoke Newington.] [*By Hobden and Porri.*

Timbering and reinforcement of the main roof; and reinforcement of the east arch rib and suspended wall of the cinema operating enclosure.

THE "GEORGE," BURSLEM, STAFFS.

DESIGNED BY LONGDEN & VENABLES

THE George Hotel occupies an important site in Swan Square, Burslem, Stoke-on-Trent, and was opened in June, 1929. Many difficulties surrounded its erection, inasmuch as the whole of the town is subject to subsidence, due to mining operations, and a specially designed foundation to the building was essential. In consultation with steel construction experts it was finally decided to build cellars in the form of reinforced rafts underneath the building—one section below the three-story superstructure of the hotel, and a separate section below the lighter buildings of the public-house and hairdresser's shops in Nile Street. As far as can be ascertained to date the methods adopted have proved entirely successful.

The owners wished to erect a business and commercial hotel upon lines somewhat more attractive than those of the average provincial type, and although the bedrooms are comparatively few in number each has been given its own distinctive decorative quality. Moreover, the layout adopted has made it possible for certain adjoining rooms to be used for more than one purpose, either singly or as a suite.

Common local bricks have been utilized in the fabric of the building, with facing bricks from the Reading district. The base is in Matlock stone, while the dressings are carried out in Hollington stone. Tiles of the Lombardic type cover the main roof, and though the chief windows are of the wooden sliding sash variety, a certain number of metal casements are also employed.

Within, terrazzo flooring and marble stair treads have been incorporated in the corridors and stairs.

The whole building is planned upon axes diverging from the hall of the corner main entrance, which takes an interesting irregular octagonal shape. The kitchens, still room, etc., form a connecting link at the rear.

Above, a similar hall occurs, this time of two stories in height, with a suite of reception rooms and bedroom corridors opening therefrom.

An admirable feature of the whole building is that no pipes of any description are visible.



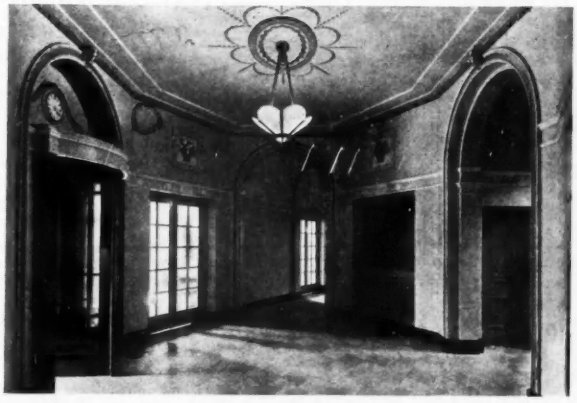
This slightly-bowed end, with windows to coffee-room on ground floor, and to four bedrooms immediately above, occurs round the corner to the left of the picture reproduced below.



The hotel occupies a peninsular site in Swan Square, of which this view shows the main façades, with a porticoed entrance on the corner. There is a subsidiary entrance farther down Nile Street, to the right.



The lounge, on the ground floor, has deep windows overlooking Nile Street, on the right. The bar servery is behind the screen at the far end of the room. In the left-hand wall are three doorways leading to the main entrance hall and corridor.





The two entrance halls on the ground floor. That on the left, entered from the main corner doorway, is eight-sided, symmetrical but not regular; that on the right, entered from Nile Street, is a true octagon, and serves the various bar rooms.



The George Hotel, Burslem, Staffs. [*By Longden and Venables.*

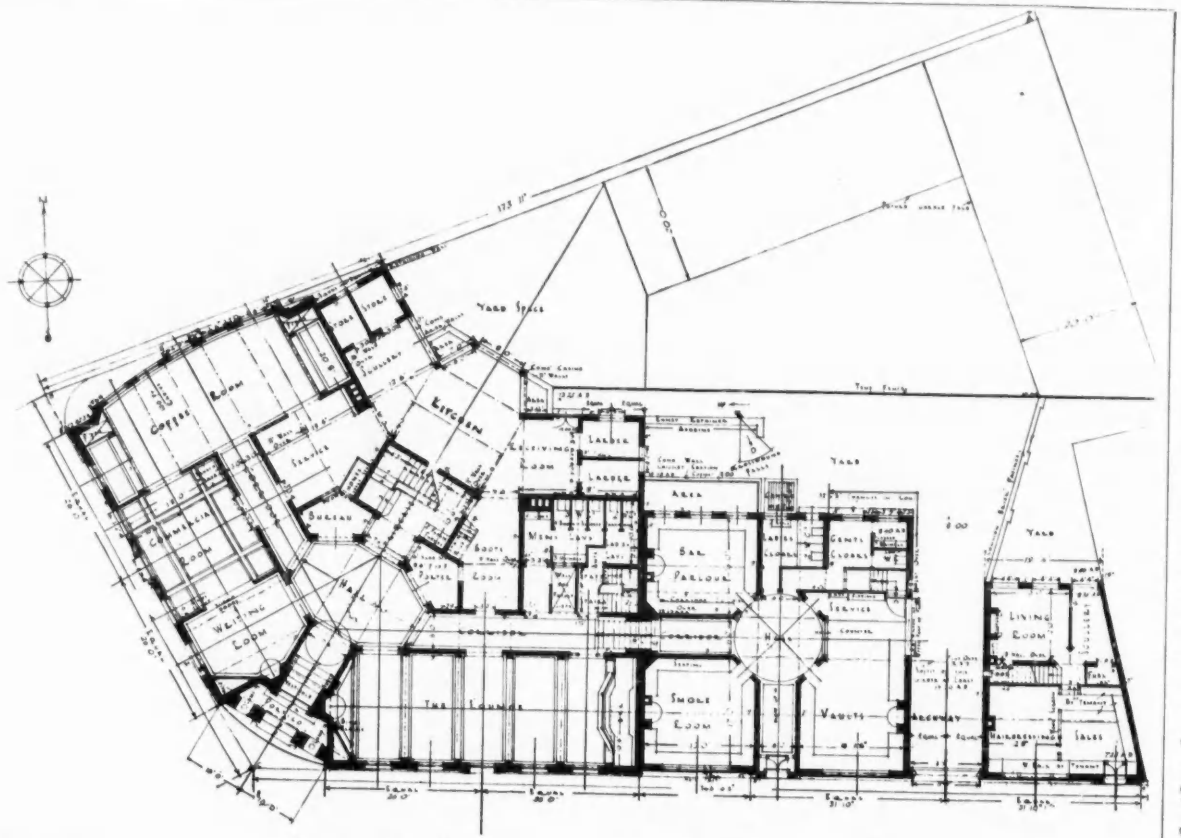
Furnished here as a private drawing-room, this apartment figures on the first-floor plan as "bedroom No. 7," and has been so arranged as to be adaptable to a variety of uses. It is entered from the eight-sided landing.

The George Hotel, Burslem, Staffs.

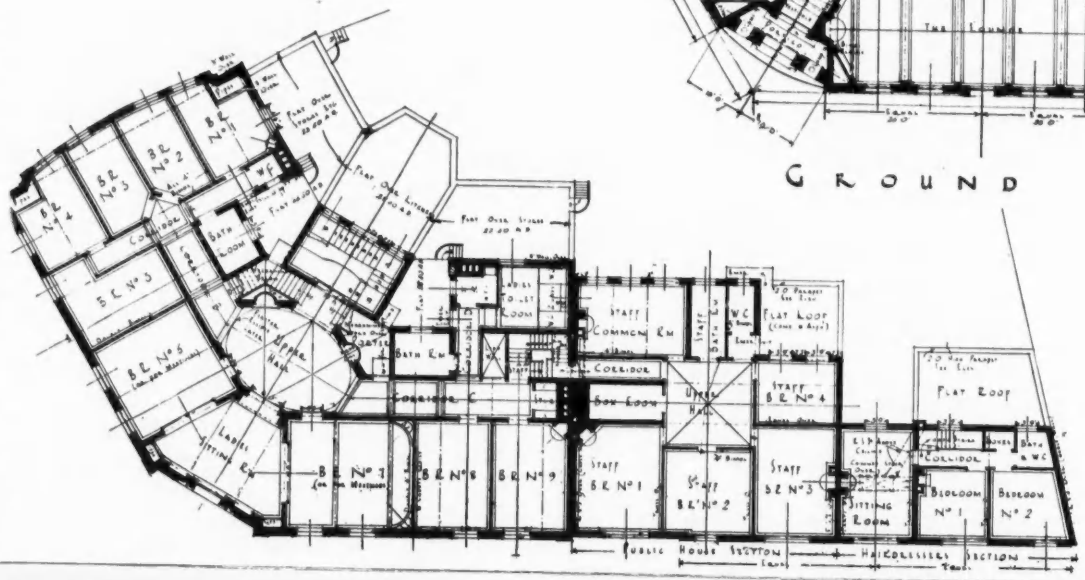
For Messrs. Parkers Burslem Brewery, Ltd.

DESIGNED BY
LONGDEN AND VENABLES

These drawings are of the ground- and first-floor plans. There are, in addition, a basement and a second story. The site was a sloping one, and the problem of foundations was further complicated by the fact that it is in a mining area and consequently liable to subsidence. The whole of the weight of the buildings is taken by two reinforced concrete rafts, one under the hotel proper, the other under the lighter buildings to the right of the substantial party-wall here shown.



GROUND FLOOR PLAN.

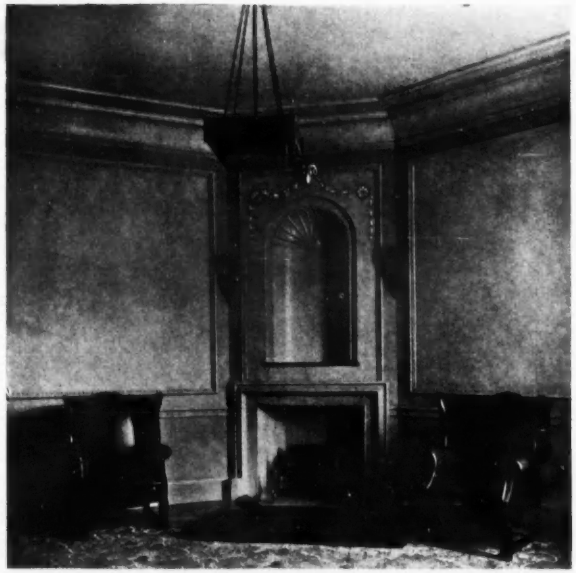


In the basement are cellars and stock-rooms, with a lower hall directly under the eight-sided one shown on the ground-floor plan, and space for a future billiards-room beneath the coffee-room. The planning on two intersecting axial corridors, with rooms opening off, allocated to the staff on one hand, and to the public use on the other, facilitates the hotel services, while giving the opportunity for intriguing vistas and rooms of unusual shape. The second story is devoted to bedroom accommodation except for the first-floor hall, which extends up through it, as seen in the view on the facing page.





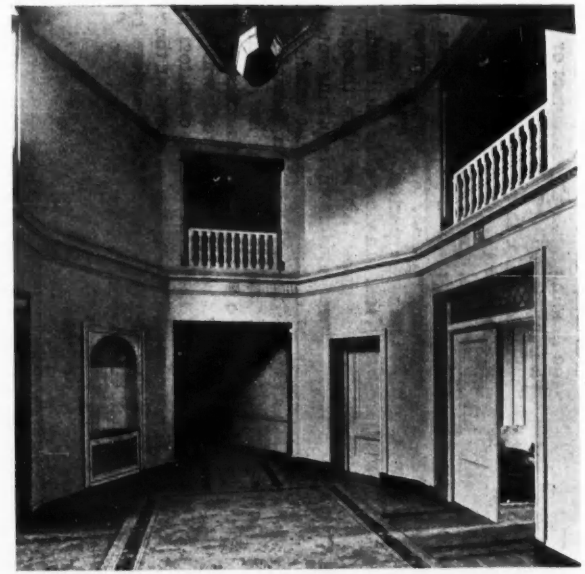




The fireplace in the writing-room on the ground floor falls in the angle between splayed walls.



One of the corridors on the ground floor.

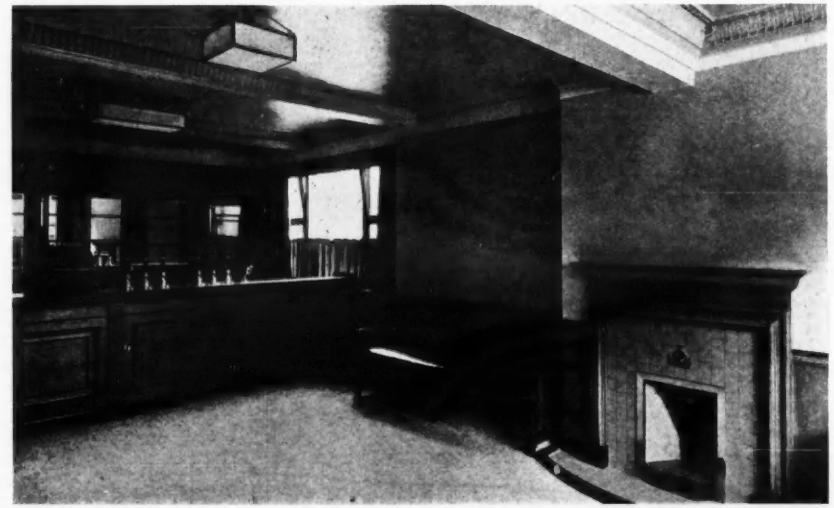


The eight-sided landing on the first floor extends upwards through the second floor.



The George Hotel, Burslem, Staffs.]

The ladies' sitting-room is placed between bedrooms Nos. 6 and 7 on the first floor, with folding doors communicating, to form a three-room suite.



[*By Longden and Venables.*

A corner of the bar or "vaults," showing the fireplace and service counter. The window looks on to the yard, which is approached through an arched way.

LAW REPORTS

ROAD CHARGES : LIABILITY OF OWNER

Warren v. *Bexley Urban District Council. King's Bench Division. Before the Lord Chief Justice and Justices Avory and Talbot.*

THIS was an appeal by Mr. Frank H. Warren, of Beaufort Avenue, Bexley Heath, from a decision of the Dartford Justices in favour of the Bexley Urban District Council, holding he was liable to pay £51 odd as the cost of making up the highway in front of his premises. The Justices determined the matter under section 8 (1) of the Private Street Works Act, 1892, and dealt with an objection by Mr. Warren under section 7 of the Act, that he was not liable for the provisional apportionment.

Mr. Elliott Gorst, who appeared for the appellant, said the question raised a point of interest to owners of small properties, who, under the Housing Acts, had purchased their houses on the system of deferred payments. The question was whether those people should be called upon to pay road charges when the roads were made up, or whether the local authority should make provision for those charges before paying the subsidy and fixing the price at which the builder had to sell. The appellant had purchased from a Mr. Middlemas, who had bought from the builder, who received the subsidy of £50 from the Bexley Heath local authority. Appellant was paying off the purchase price by instalments. Counsel argued that the road charges should have been allowed for in the price paid by his predecessor in title, and that it should have been settled by the Council before the selling price was fixed.

Without calling upon Mr. Frank Powell for the respondent Council, the Court dismissed the appeal with costs.

The Lord Chief Justice, in giving judgment, said if a man got a house cheaply he should be more able to pay the road charges. The Council had given the appellant proper notice, and had observed all the conditions precedent to create a liability by the owner of the house. The appellant being the owner, he was liable for the charges. The appeal therefore failed.

Justices Avory and Talbot concurred.

FORFEITURE OF LEASE CLAIM

Wood and another v. *Wood. King's Bench Division. Before Mr. Justice Swift.*

This was an executor's action against the son of the testator for possession of a shop and premises, 292 Stamford Hill, London, with arrears of rent from December, 1927, to March, 1929, and mesne profits.

Mr. Goff, for the plaintiffs, said the premises were let to the defendant on a twenty-one years' lease, at £120 a year, from January, 1909. During his father's lifetime defendant only paid £108 a year, with his father's consent, and the question was whether that concession was now binding on the executors. The widow was the tenant for life of the estate, and the extra £12 a year was an important consideration to her. The executors were now seeking to enforce the payment of £120 a year by forfeiture.

Mr. Critchley, for the defendant, said the original arrangement was that his client should pay £108 a year. The father, however, put £120 in the lease, but before it was signed it was arranged that the rent should be only £108 a year as long as the defendant remained in possession and did not become bankrupt. Counsel's submission was that this was a good collateral agreement, as it was not a question of varying a written agreement.

Mr. Goff contended that there was no evidence that that arrangement should be binding upon the executors or upon a purchaser.

His lordship, in giving judgment, said it was clear that from the making of the lease until the death of the testator a rent of £120 was never paid, but that was in pursuance of a verbal agreement between the parties. The sum paid was £108. In view of decided authority on the point, his lordship thought he was precluded from inquiring into the terms of any agreement made at or before the signing of a formal instrument, and therefore he could not inquire into what the agreement was under which the £108 was paid. When the testator died, executors were entitled to enforce payment at the rate of £120 a year. He therefore gave judgment for the plaintiffs for £15, which was the amount due at the date of the issue of the writ. As the defendant was claiming as a right a rebate of £3 a quarter, it was not a case in which the plaintiffs could ever have supposed that forfeiture of the lease would be granted.

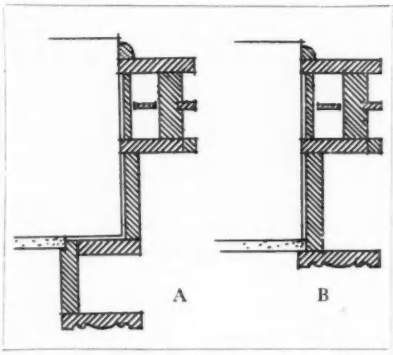
Judgment for plaintiffs for £15.

ARCHITRAVES AND CURTAINS

BY DELTA

IN the majority of houses one enters, on lifting the window curtains, there may be found architraves — some good, some bad, but still architraves— on which someone has expended time and trouble and someone else has expended money. Once a year, when the curtains are taken down for spring cleaning, the charwomen can gaze at these architraves and discuss the subtleties of their various mouldings; at other times they seem somewhat wasted, hidden, as they are, out of sight, and used generally as a fixing for curtain rods, valance boards, etc.

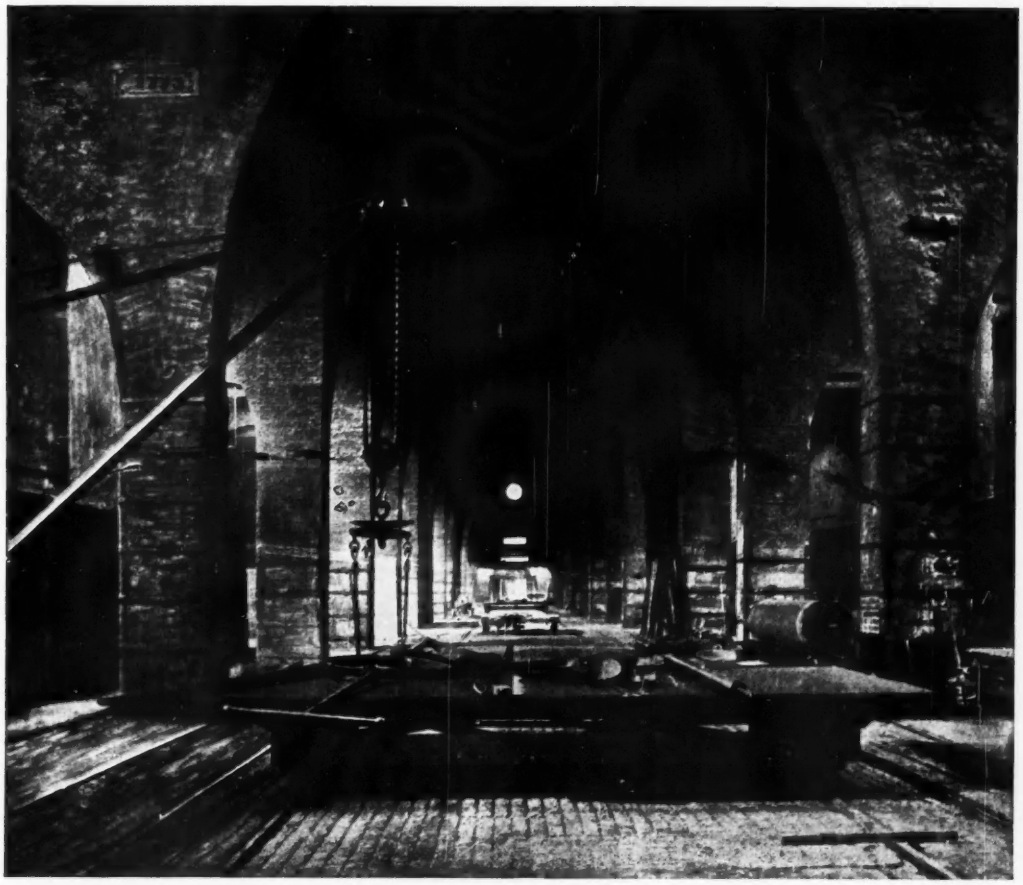
Architects are often accused of being too prone to design rooms without considering the furnished and inhabited whole; the window curtain question is, I think, a good point for the prosecution. The trouble comes probably from making half-inch details for the builder without having been obliged to make some sketch or scale drawing for the client.



(A) An ordinary curtain box, and (B) a suggested improvement by Delta, shown in plan

Directly a room becomes of sufficient importance for its design to be approved by the client, the architect draws in the curtains because they are of necessity a big feature in the room and they give a look of reality to the drawing. Immediately he draws in the curtains he changes the architraves to curtain boxes of some kind because the necessity is brought home to him.

The proper curtain box shown in figure "A" costs very little, but it is not always necessary even to go to this expense; for less important windows, where the curtains are not carried down to the ground, the architrave, instead of being fixed in its usual position, can be brought forward to project over the window reveal (and below the head), as in figure "B." This may appear to diminish the light, but in practice it reduces it very little, for no one draws curtains back clear of the reveal, and thin curtains of such materials as silk, taffeta, etc., suitable for such windows, will occupy very nearly the same position as they ordinarily would. The effect is tidier and more architectural in every way and the curtains are kept in their proper place.



ENGLISH PRECEDENT No. 110

THE OLD CASTING HALL, RAVENHEAD, LANCS.

Reminiscent of some ancient church, the original Casting Hall still stands in Messrs. Pilkington's works at Ravenhead, undisturbed by the ceaseless activity which surrounds it. Here it was in 1773 that the British Plate Glass Company produced their first cast plate. Her Majesty Queen Alexandra (as Princess of Wales) saw glass made here in 1865.

Since then the hand of progress has wrought but little change in the appearance of the Hall. Parts have been pulled down to make room for the Cathedral works, but the central aisle shown above has been preserved on account of its historical associations.

GREGORIES, BUCKS: THE HOUSE OF J. L. GARVIN



Gregories, Buckinghamshire, from the south. The large window on the right of the house belongs to "The Shepherd's Kitchen," now Mr. Garvin's study. The gabled porch was added by him

IN 1921 Mr. J. L. Garvin had occasion to look for a small country house. He searched every county within reasonable reach of London, and decided, eventually, upon Gregories, Beaconsfield, Bucks, the house associated with the memory of Edmund Burke. When he went to view the house, Mr. Garvin found it possessed an old staircase that led up from the kitchen to the bedroom above; a Cromwellian cupboard in the parlour; and crooked passages and ancient beams. Outside he was ravished to discover Burke's coach-house and the stables where the four black horses lived who drove Burke up to town for Parliament.

The first changes made by Mr. Garvin were the removal of pink marble mantelpieces that were desecrating the dining-room and the drawing-room, and the replacing of them by wide open brick hearths. The second alteration was structural, and was carried out under the direction of Mr. Paul Phipps. The house is L-shaped, and the kitchen wing towards its south-east end had seemed to continue into a tall, square, cell-like place called the "Shepherd's Kitchen."

To provide space for more books, Burke's coach-house has been converted into the library.

Opposite to Burke's coach-house, across a stretch of grass and at right angles to the barn, were the stables. These have been converted into a sort of record room with timbered gables, designed by Mr. Garvin himself. It is called "Piebalds," and is at some future date to have its iron sign swinging outside like the inns of the old town.

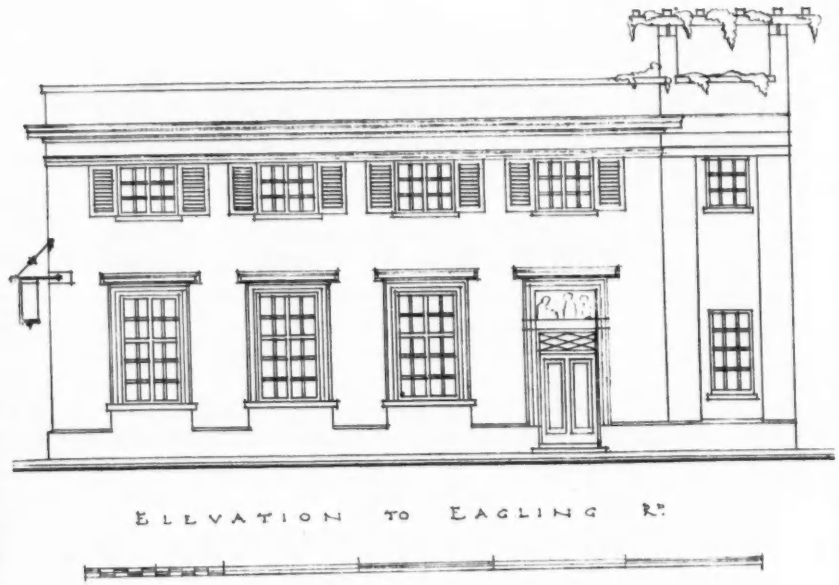
The alterations that have been carried out by Mr. Garvin are described in an article by Miss Viola Gerard Garvin, which appears in the current issue of *The Architectural Review*, and from which these brief particulars have been extracted.



[*From* The Architectural Review.

Burke's coach-house, now the library at Gregories, Buckinghamshire, as seen from Piebalds. The library is built of the original old red bricks. The door, chimneys, and windows have been added, but otherwise the shape of the building remains exactly as it was





NURSERY SCHOOL FOR THIRTY INFANTS

Built at Eagling Rd., Bow, E.

FROM DESIGNS BY

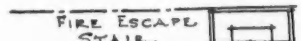
C. COWLES-VOYSEY

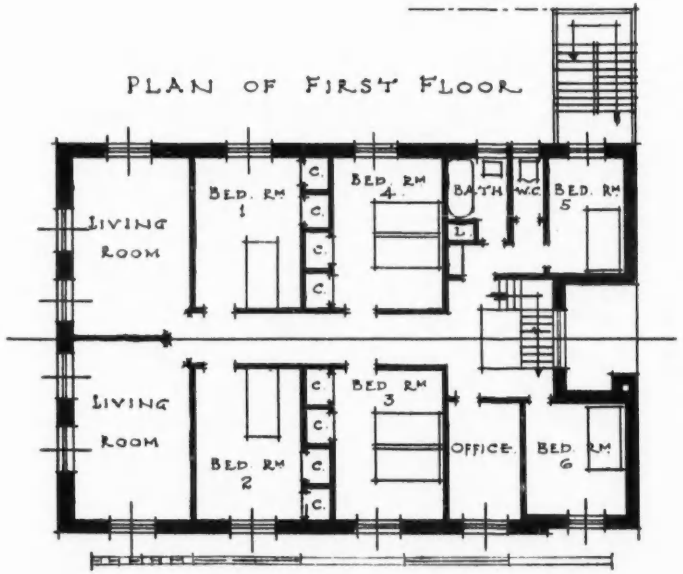
THIS nursery school provides accommodation for thirty children of the neighbourhood under school age. The children remain during the day, while mothers are at work, and play and rest and receive nursery, school and medical attention. On the ground floor there is a schoolroom some 35 ft. square, with cloakroom, lavatories and kitchen adjoining. The first floor is occupied by the living-rooms of the resident staff, and over these there is a flat roof which is used as a garden and playground. A portion of this has now been roofed in to form an "open-air" shelter, enclosed with folding doors and windows.

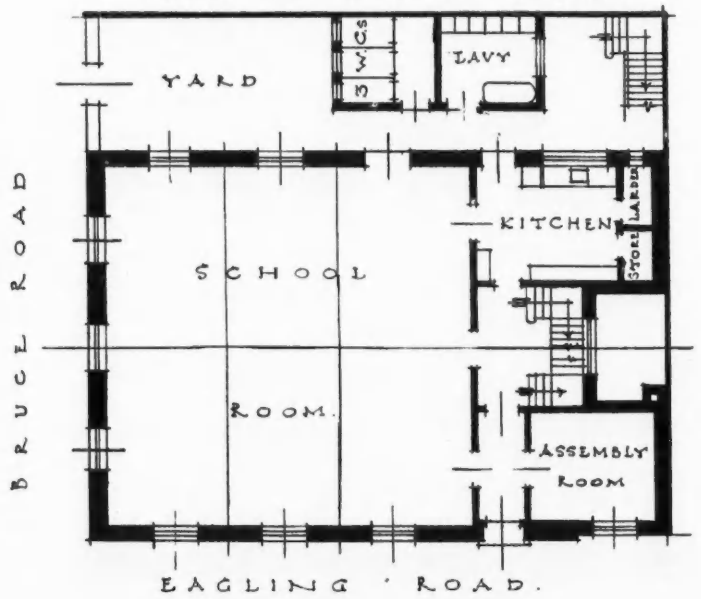
The walls are of brick, faced externally with 2-in. sand-faced, hand-made, multi-colour Dorking bricks, with artificial stone plinth, cornice and window dressings. The external louvre shutters are painted bright green. The over-door to the main entrance is in glazed stoneware and was modelled by Mr. Gilbert Bayes, the sculptor, who also carved and painted the signboard hung at the street corner.

The floors and staircases are of reinforced concrete, covered with battleship linoleum and quarry tiles in the entrance hall, kitchen and lavatories. The flat roof is covered with asphalt. The walls generally have composition dados with coved skirtings and enamelled plaster above. An acoustic ceiling of Cabot quilting was formed in the large schoolroom. An attempt was made to avoid dust-traps and to provide a permanent and hygienic finish.

The house is decorated in bright colours, with mural paintings of subjects interesting to small children. Lockers, clothes-hooks and personal belongings are identified by drawings of animals and flowers in place of numbers.





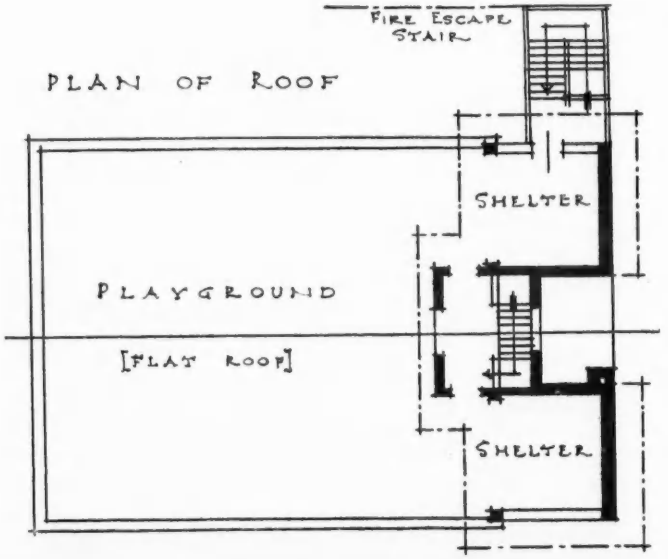


Plans of the school; and a photograph of the staircase at first-floor level.

NURSERY SCHOOL AT BOW, E.

By

C. Cowles-Voysey





CHARING CROSS BRIDGE BILL: COMMITTEE'S PROCEEDINGS

BY OUR SPECIAL REPRESENTATIVE

THE Chairman (Sir Henry Cautley) has announced that the Committee intend later to request that evidence should be given by an architect to be appointed by a representative body (presumably the R.I.B.A.) and that the Committee will be guided by his advice on the architectural treatment of the viaducts.

Sir Henry Maybury, giving evidence in support of the official scheme, said that while Waterloo Bridge might be the most convenient route for north and south traffic, it would not solve the problem of the Strand and east and west traffic generally. It might not be impossible to make a way from the bridge into Northumberland Avenue, but it would be very inadvisable. In order to make an approach to the bridge from the Embankment on that side of the river, it would be necessary to raise the Embankment 15 feet, so as to give the required head-room for navigation. Such a scheme would spoil the Embankment entirely. He did not consider that the viaducts on the south side of the river would impede traffic if they were properly lighted. The railway company proposed to construct shops in these viaducts and were expecting to make considerable revenue from them.

Mr. Frederick Palmer, joint consulting engineer for the project, was cross-examined by Mr. Tyldesley Jones, K.C., on behalf of users of the river.

After some discussion, witness stated that the L.C.C. were prepared to give an undertaking that the three northern arches of Waterloo Bridge would be kept open while the northern arches of Charing Cross Bridge were being constructed, and conversely.

The Chairman: This is surely an engineering matter that ought to be arranged between the two authorities.

Counsel: The real point is that the London County Council are being given a free hand to hold up the river, which is of the utmost importance to London.

After further discussion, Mr. Tyldesley Jones said that negotiations had been going on between the engineers for a fortnight. He agreed with the suggestion of the Chairman that these negotiations should be reopened.

Mr. F. J. Wrottesley, K.C. (for Lambeth Borough Council) questioned Sir Henry Maybury regarding the desire of the railway company to retain Charing Cross Station on the north side of the river, and asked whether the railway bridge was not approaching the end of its life. The witness said that he could not agree that that was so now. With a large part of the traffic electrified the station was much more advantageous than it had been for years.

The Chairman (to Counsel): What is the object of these questions? I thought Lambeth did not want the station removed.

Mr. Wrottesley: We do want it removed, but we object to the Lion Brewery site; we want it removed to the Waterloo Junction site.

Mr. Wrottesley then questioned the witness again regarding the "tunnels."

Sir Henry Maybury: They are not tunnels but covered roadways.

Counsel: I call them tunnels, but I will accept your description. Do you like the covered way at Vauxhall?—Speaking as an engineer, I do not like it.

And the covered ways in Lambeth are to have a 17-ft. headway as against 18 ft. 8 ins. at Vauxhall?—That is so, but we are now building bridges all over the country with a 16-ft. headway. That gives plenty of clearance for a covered-in omnibus, which is 14 ft. 3 ins. high.

In reply to further questions, Sir Henry Maybury said that this scheme provided a very good beginning for the development of Lambeth.

The Chairman: I quite agree, if you were not blocking it up with the station.

Sir Henry Maybury: I think it will be a big jumping-off ground for development in Lambeth. The rateable value will be enormously enhanced by the high standard of building set by this scheme.

Sir Edwin Lutyens was then called, and, replying to Mr. Charteris, K.C. (for the promoters), said that when in March, 1929, he was invited to advise on the possible layout of the scheme his hands were in no way tied. His business was to provide a solution of the difficulties, and at the same time present a scheme which would permit of architectural treatment. He was forced to the conclusion that the only practical site for the railway station was that now proposed in the scheme. He was satisfied from the architectural point of view that this would be a plan to the advantage of the area concerned. He had had regard to traffic, navigation, and engineering considerations. He considered that the balustrades and cornices of the bridge itself could be constructed in masonry. The buildings to be placed on the south side of the river would set a standard for the development of that area.

Mr. Charteris then referred to the question of the covered roadways, and Sir Edwin Lutyens produced two pictures showing how such roadways might appear by day and by night respectively. They were examined by members of the Committee, to whom Sir Edwin explained them in the course of conversation.

The Chairman: These are very beautiful pictures. Where is there such a covered roadway in reality?

Sir Edwin Lutyens (pointing to his forehead): Here. I have not seen it done anywhere, but I am quite sure that it can be done.

Mr. Charteris: They are indications not of work that will be carried out but of what can be done?—Yes.

In giving evidence, you only do so after having investigated all the possibilities and satisfied yourself that this is the best scheme?—Yes. I have had plenty of chance of getting out of this ordeal. (Laughter.)

The Chairman then stated that the Committee found themselves in a difficulty regarding the instruction from Parliament that designs for the bridge should be secured by competition or otherwise. Although Parliament had instructed the Committee, they had given the Committee no means of carrying out the instruction. It was an absurd position and they would like to know if learned counsel could assist them.

After discussion between counsel, it was decided that an agreed clause should be drafted endeavouring to give effect to the instruction.

Mr. F. D. Villiers Bayly (for Lambeth Borough Council) questioned Sir Edwin Lutyens about his pictures representing the arcades to be constructed in Lambeth. The witness agreed that there was nothing very dissimilar between the neighbourhood of Vauxhall Station arcade and the neighbourhood in Lambeth that would be affected by this Bill.

Counsel: Is there any reason why the arcade at Vauxhall Station has not developed on the lines suggested in your pictures?

Sir Edwin Lutyens: I suppose they had not the chance of employing me. (Laughter.)

Counsel: Then, it is having the ad-

vantage of your services that is going to convert people into building arcades like this. You will forgive us for being a little sceptical?—Well, look at the old third-class railway carriage compared with a modern first-class saloon.

I do not quite see the analogy. In any case, you are unable to give the Committee any instance of covered roadways like these having been constructed?—No; but think of the new underground approaches to Piccadilly Circus.

Do you compare them with these covered roadways? — No, but the method of lighting and so on at Piccadilly Circus was quite a new thing that had never been done before.

This picture of the arcade by night shows the people of Lambeth taking the air?—Yes.

Or shall we say breathing the carbon monoxide from motor traffic that has been held up?—I am assured that there will be no difficulty of that kind.

And they are listening to the music of the trains overhead?—Yes, a comforting rumble.

The Chairman : You think the sound will be deadened to that extent?—Yes.

Sir Edwin Lutyens was then questioned as to the lighting of the arcades, and said that the maximum amount of natural light would be obtained by having the roof sloping towards the centre from each end. There was enough space in the plans to provide for this. He also proposed that there should be flood-lighting, both day and night. The roof of the arcade could be kept clean by running a tramcar or other vehicle through it with a broom attached to the top.

Counsel later referred to the site, comprising the proposed buildings between the County Hall and the new station, and suggested that it was a difficult site to deal with.

Sir Edwin Lutyens : No; it is rather a nice site.

Counsel : Only so long as it can be dealt with as a whole?—No; that would not make it more difficult, but only more English.

What does that mean?—That it would be more haphazard.

Sir Herbert Walker, general manager of the Southern Railway, was then called. In reply to Mr. F. G. Thomas K.C. (for the promoters), he said that however good the present scheme were made and however much it were modified, it would still inconvenience a certain number of the Southern Railway passengers, and the only justification for the removal of the present station was the wider national interest. They considered that the site now proposed would put their passengers to the least possible inconvenience.

In reply to further questions, Sir Herbert Walker said that the railway company had abandoned the idea of ever amalgamating the south-eastern and the south-western services in one station at Waterloo. There were great engineering difficulties and it would involve rebuilding Waterloo Station, which had cost £2,300,000.

Sir Herbert Walker said it would be almost impossible from the engineering point of view to put the existing station underground at Charing Cross. An underground railway terminus was not really convenient, especially where, as at Charing Cross, there was a great deal of luggage. There were engineering difficulties in putting the station on any other site on the south side of the river.

Sir Felix Pole, a former general manager of the Great Western Railway, said he would like to see a Royal Commission appointed to consider the whole question of London's railway termini. All railway stations might be underground in the future. He looked forward to the time when Waterloo Station was covered all over with buildings and not merely with a roof. He saw no reason why our railway stations—even Waterloo Junction as it now stood—should not be dealt with in that way. Architectural beauty need not be confined to the station approach. If Charing Cross Station was to be moved to the south side of the river, the Lion Brewery was the only possible site.

Mr. Frank Pick, general manager of the Underground Group, said that a road bridge at Charing Cross would relieve the enormous pressure at Trafalgar Square; 1,746 omnibuses would use the bridge as soon as it was opened. As a result also, one fare stage would be eliminated from all fares on buses using that route, because the journey would be shortened.

Sir Lynden Macassey, K.C., for the promoters, announced that a clause had been agreed to by which the London County Council undertook not to stop up certain streets on the Adelphi estate until two new streets, one giving access to the Strand, and the other to Northumberland Avenue, had been constructed and opened.

The New Housing Bill

THE Housing Bill which the Government have introduced was expected to be debated on second reading on Monday and Tuesday last, and it will certainly give rise to lengthy proceedings in Committee.

The first part of the Bill deals with clearance areas and improvement areas, and the second part with individual insanitary houses. The definition of a clearance area is substantially the same as that of an unhealthy area under the present law.

The area can be cleared in two ways, by requiring the owners to demolish the buildings or by the local authority purchasing the area and then arranging for the demolition. The first method is new and is intended to enable the local authority to secure the removal of a bad slum without being obliged to incur the heavy capital expense of purchase and clearance.

The second method of dealing with a clearance area will be by purchase by the local authority, which would itself undertake the removal of buildings on the site. The procedure is intended to be simpler and more expeditious than that at present in operation, and does away with the necessity for a formal scheme. The local authority, having bought the land by agreement or by compulsion, must proceed to demolish the buildings and either appropriate the land for some purpose for which they have statutory powers, or dispose of it in some other way. In some cases they may have to re-house on the site or they may keep it as an open space.

In Part 2 of the Bill there is an alteration of the existing law with regard to the repair and demolition of individual insanitary houses. It is intended to simplify the procedure and provides that the appeal tribunal shall be the County Court instead of the Minister. Houses which are considered unfit for human habitation may be divided into those which can be made fit at a reasonable cost and those which cannot. In the case of houses in the first category, local authorities may require the owner to carry out the necessary work, or, if the owners default, may do it themselves and recover the cost. In suitable cases money may be lent to owners undertaking repairs. If the house cannot be made fit at a reasonable cost, then the local authority may enforce an order for its demolition.

A further attempt is to be made to deal with rural housing, and it is proposed to put a new responsibility upon the County Councils by enabling them to undertake building on behalf of a rural district, by empowering them to contribute to the expenses of ordinary rural housing, and by putting an obligation on them to contribute to houses provided by rural councils for agricultural workers or persons of a similar economic condition. It is proposed that the unit grant shall be reviewed every three years, and at the same time the period at which the Wheatley grants are reviewed will be increased from two to three years.

St. John's Lodge, Regent's Park

Major Edmondson asked the First Commissioner of Works what decision had been arrived at for dealing with the ground now occupied by the Botanical Gardens, Regent's Park, after

the expiration of the present lease, and for dealing with St. John's Lodge.

Mr. Lansbury, First Commissioner of Works: The question of the future use of the Botanic Gardens and of St. John's Lodge is under consideration at the present time, but no decisions have yet been taken.

New Labour Exchange

Mr. Remer asked the First Commissioner of Works what progress had been made in finding a site for the new Macclesfield labour exchange, as requested by the Minister of Labour.

Mr. Lansbury: A site has been found and my department's architects are considering whether it meets their requirements.

Art Galleries and Museums

Mr. Granville Gibson asked the First Commissioner of Works if, in view of the fact that Government property was not covered by insurance, he would carefully consider the desirability of installing with sprinklers Government art galleries and museums containing treasures impossible of replenishment in the event of loss by fire.

Mr. Lansbury: The installation of sprinkler systems in Government art galleries and museums generally involves the risk of serious damage by water to large sections of the collections in the event of the system being brought into operation. The policy at present followed of building in fire-resisting materials, eliminating potential fire-risks wherever possible, and maintaining systematic fire patrols, has been definitely adopted as providing adequate safeguards, but sprinkler systems have been installed in the basements and store-rooms of certain museums where there is no direct risk of damage by water to exhibits.

British Embassy at Moscow

Sir Frederick Hall asked the First Commissioner of Works what was the estimated cost of the work on the British Embassy at Moscow, and to whom it had been entrusted; how much of the estimate represented wages and how much was in respect of material and other items; whether the wages of the men employed for the purpose will be paid direct, and, if not, by whom; if he will say what classes of workers will be employed, and what wages they would receive expressed in terms of English currency.

Mr. Lansbury: Negotiations for the lease of the new Embassy at Moscow are still in progress, and although the necessary adaptations have been estimated roughly at £10,000, detailed plans for the work and method of execution have still to be settled. It is not possible, therefore, to give specific answers to the remaining points in the question.

CORRESPONDENCE

SEA SALT AS A CAUSE OF THE DECAY OF LIMESTONE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Referring to the important article by Messrs. A. R. Warnes and D. Northall-Laurie in your issue for March 19 on sea salt as a cause of the decay of limestone, we should like to point out that the Building Research Station has recently encountered several similar instances of serious and rapid decay resulting from the presence of sea salt in Portland stone. In all cases the buildings were comparatively new.

While agreeing in principle with the article in question, we venture to suggest that the fact that Portland stone may on occasion suffer contamination by direct contact with sea water is the important factor and one which requires more emphasis.

There is, as the authors point out, evidence that sea salt is carried inland by the wind, but were this an important cause of the contamination of Portland stone by sea salt, either in buildings or in the quarries, then decay from this cause would, we think, be much more common. It is well known, for instance, that the majority of the buildings in the Island itself are in a very good state of preservation; also, certain blocks of stone quarried at the time of the building of St. Paul's Cathedral, which had lain in the Island for nearly 200 years, were reported in 1861 to be still in good condition; indeed, a portion of one such block, which was presented to the Geological Museum as recently as last month, shows no signs of decay such as would be expected were wind-borne salt in itself a notable cause of decay.

The important factor seems to us to be that contamination of Portland stone by sea water may occur either accidentally, as, for instance, when an exceptionally high sea breaks into a railway-goods siding or when stone is taken from low-lying quarries which are subject to flooding by sea water.

Our observations have demonstrated that decay due to the presence of sea salt is localized; it has been observed to occur in and around particular blocks in several buildings. But the fact that the surrounding stonework is also affected seems to us to refute the suggestion made in the article in question that localized decay occurs because "the salt concentrates in those portions of the stone exhibiting a higher capillary head than contiguous portions." In our opinion, it is more probable that localized decay occurs because parts of one consignment of stone tend to find their way into more than one building. It is unlikely that more than a small proportion of sea-salt-contaminated stone finds its way on to the market.

Salt-contaminated Portland stone in isolated blocks decays at an alarmingly rapid rate, either from causes similar to those mentioned by the authors of the article, or, possibly, because sea salt is deliquescent and so causes the stone to be more readily attacked by acid sulphur gases in the atmosphere. This latter point is now under investigation at the Building Research Station.

It is suggested that, in their own interests and in the interests of their customers, the stone firms concerned would be well advised to take immediate steps to see that no stone is put on the market which has, from any cause, been in direct contact with sea water. Otherwise, occurrences such as that described by Messrs. Warnes and Northall-Laurie will continue to occur, to the detriment of the deservedly good reputation of Portland Stone.

P. W. BARNETT,
FOR THE DIRECTOR OF
BUILDING RESEARCH, WATFORD.

OBITUARY

DAVID RAESIDE: 1882–1930

DAVID RAESIDE, whose untimely death at the age of forty-eight years was briefly noted in last week's issue, was chiefly concerned with the business and practical side of the widespread activities of Sir John Burnet and Partners, with whom his association had been life-long. It is not the least formidable and arduous part of architectural practice, and Mr. Raeside's personality was a great asset in carrying it through: he had endeared himself to the whole legion of colleagues with whom it had been his lot to co-operate.

He started his career by apprenticeship with Mr. Anderson, of Ayr, in 1896. Three years later, when this office closed down, he entered that of Sir John Burnet in Glasgow. Twenty-one years ago, last November, he transferred to Sir John's London headquarters. During the war he saw service attached to the 2nd London Division of the Royal Engineers, in Egypt, in 1917–1919, and was also assistant architect to the War Graves Commission in Palestine. It was shortly after his return that he was taken into partnership by Sir John Burnet, in 1920.

He was buried at his native town of Prestwick, in Scotland, on March 28, and on the same day a memorial service was held in London at the Chapel of the Savoy.

JAMES H. CRAIGIE: 1870–1930

We regret to record the death, after a long illness, of James H. H. Craigie, F.R.I.B.A., of Glasgow.

He was articled to the late James

Hamilton and studied at the School of Art and Technical College, Glasgow, and also in France and Italy. Until 1915 Mr. Craigie was in partnership with the late George Bell, F.R.I.B.A., and thereafter with his son. He was joint architect to the Glasgow Courthouse Commissioners, and a J.P. for Glasgow and Lanarkshire in 1922-23.

SOCIETIES AND INSTITUTIONS

MODERN ART

The North Staffordshire Architectural Association held their final meeting at Hanley, when Mr. W. Aumonier delivered a lecture on "Modern Architectural Carving and Sculpture." Mr. Walton Stanley presided.

Mr. Aumonier referred to the modernist movement as a very vital force stretching from Scandinavia right across Europe. He stated that "the sculptor obtains his inspiration from the architect, and this modern phase of decorative sculpture largely arises from the opportunities afforded in modern architecture."

People, he said, were no longer surprised if a building was erected devoid of any mouldings or architectural embellishments, and with its sculpture hewn out of the rough stone, left with all the signs of its primitive origin. The desire for simplicity and directness in building had given a great opportunity to the individual sculptor and had brought to the front some very great craftsmen.

He was impressed with the idea that climate had some bearing on the grimness of much modern sculpture, for modernism in this direction had its origin largely in Scandinavia. Germany had fostered the new sculpture to a much more satisfactory conclusion than elsewhere, though here some specimens would be thought exaggerated and violent. It was curious that the Latin races had never quite capitulated to modernism. In England, he added, we were at the cross-roads, and there was a marked and strong tendency among the younger architects and sculptors to develop this modern phase.

In conclusion, he said that the fundamental principle of all good sculpture was the sympathetic collaboration of architect and sculptor, each striving to uphold the ideals they represented.[1]

The lecture was illustrated by lantern slides.

ARCHITECTURE OF THE COTSWOLDS

Mr. H. Stratton Davies, in a lecture to the Liverpool Architectural Society, described the struggle to preserve the beauties of the Cotswold domestic architecture. Major Duncan A. Campbell presided. The lecturer said, in these days of the jerry-builder they were very fortunate that so small a part of the Cotswolds had been spoilt. It was, he believed, the least spoilt part of England. A study of the extremely modest, restrained and dignified style of the old buildings there would have a good effect in these days of extravagant, ultra-modern ideas. The Cotswold builders, of course, were fortunate in their materials. He knew of no other buildings which so harmoniously engaged with the landscape round about them.

ROYAL SOCIETY OF BRITISH SCULPTORS

At the annual general meeting of the above society, Mr. W. Reynolds-Stephens was elected President for his tenth term of office. Mr. Gilbert Bayes was re-elected vice-president and Mr. C. L. Hartwell, R.A., treasurer. Mr. R. O. Gross and Miss Winifred Turner were elected Associates.

BYZANTINE ARCHITECTURE

Sir Banister Fletcher, P.R.I.B.A., in his final lecture on ancient architecture, at the Central School of Arts and Crafts, traced the Byzantine style as it travelled from Constantinople in the East to Venice further West, and to other art centres in Western Europe, where, he said, it had survived sporadically down to the present day. He also referred to the chief monuments of Byzantine art in Greece, France and England.

THE LIGHTING OF TEXTILE MILLS

A lecture on the above subject was delivered before the Illuminating Engineering Society, by Mr. S. Anderson.

Mr. Anderson stated that about 90 per cent. of the textile mills in this country were lit by electricity, many generating their own supply by means of a dynamo driven from one of the main steam engines, and thus the cost of power to them was negligible. They had, however, in most cases, a considerable objection to increasing their lighting load owing to the fact that their generators were already fully loaded, and any extensive improvement in lighting would necessitate the installation of a new dynamo, probably accompanied by additions to the supply cables in order to cope with the increased load.

The provision for adequate daylight illumination was, he explained, very variable, but in general, spinning mills were poorly lighted during daylight, while weaving sheds were the entire reverse. The former were of the multi-story type, and rarely had sufficient ceiling height and window area to give good illumination in the middle of the floor, while the latter were invariably saw-tooth roof-lit buildings, which gave excellent lighting to the looms.

[1] The fruits of much research by Mr. Aumonier on the subject are to be published by the Architectural Press in June.

PRESENTATION TO MAJOR TASKER

Major R. I. Tasker, Chairman of the L.C.C. and last year's President of the Incorporated Association of Architects and Surveyors, was entertained at a dinner given by members of the Association on March 28. He was presented with black opal and diamond cuff links and studs, and a replica of the Presidential badge, and Mrs. Tasker with a diamond brooch and carriage clock.

COMPETITION CALENDAR

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated this year. Assessors: Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums: £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs: April 28.

May 16.—Messrs. Ewart and Son, Ltd., in conjunction with the Association of Architects, Surveyors and Technical Assistants, invite designs for a lock-up hangar for an aeroplane. The competition is divided into two classes, for those over and under 25 years of age at midnight, May 15–16, 1930. Assessors: William H Hamblyn, A.R.I.B.A., and Chas. McLachan, A.R.I.B.A., with A. N. Cathgart as technical adviser with regard to roofing, ventilation and hot-water supply. Two prizes will be awarded in each class, namely, a free place in the A.A.S.T.A. party to Madrid in September, and includes second-class rail and steamboat travel throughout and all hotel expenses, except personal expenses. Messrs. Ewart and Son, Ltd., reserve the right to publish or make use of any of the designs for which a prize is awarded, but do not reserve the right to build in accordance with any of them. Particulars of the competition, etc., are obtainable from A. Seymour Reeves, Secretary, A.A.S.T.A., 26 Buckingham Gate, S.W.1. Latest date for submission of designs: May 16, 1930.

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit, £1 1s. Latest date for submission of designs: June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor: J. Ernest Franck, F.R.I.B.A. Premiums: £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art,

and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall which is to be built on the site of the old town hall, at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

No date.—The Leicester Corporation invites local architects to submit designs for the erection of a library at West Humberstone. Assessor: Hugh Gold, F.R.I.B.A. Premiums: £75, £50, and £25.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATION

9266. Farmer, E. C., and Structural Steelcrete, Ltd. Reinforced-concrete structures. March 22.

SPECIFICATIONS PUBLISHED

326625. Josz, E. Process for the manufacture of plaster for building and like purposes, and the product thereof.

326678. Sorensen, H. Construction of fireproof buildings.

ARCHITECTS' WILLS

Sir Laurence Weaver, K.B.E., F.S.A., HON. A.R.I.B.A., of Dunedin, New Road, Ashtead, Surrey, left £28,263.

Mr. Frederick Arthur Howorth, of Thistleton, Hicks Road, Waterloo, near Liverpool, retired architect, left £21,208 (net personalty £21,128).

Mr. Allan Stevenson, of Largie, Castlehill Road, Ayr, architect, left £20,068.

Mr. Thomas Stokes, of Topcliffe Road, Sowerby, near Thirsk, architect and surveyor, left £7,142 (net personalty £3,635).

Mr. Edward Percy Thompson, A.R.I.B.A., of Bodimeades Cottages, Elstree, Herts, left £5,122 (net personalty £4,440). He bequeathed a copper washbowl from Newgate Prison which was pulled down in 1903, and iron stand belonging to it, to C. G. Lawson, with an explanation that it should be used as a rose bowl. To an old friend he left a ten-gallon cask of Scotch whisky, and expressed the wish that the cask should be filled from time to time to prevent tilting it when drawing off the contents.

TRADE NOTES

The lighting and heating section of the Ideal Home Exhibition should not be missed by architects visiting Olympia. It is evident that increasing provision must be made for accommodation and connections for electrical appliances in the modern home, and such displays and demonstrations as were given by Messrs. Ediswan in the "Hall of Ideals" (designed by Mr. T. S. Tait, F.R.I.B.A.) will do much to increase the demand, not only for electric cookers and fires, vacuum cleaners and fans, but for many other appliances. Refrigerators, washing machines, floor polishers, violet ray and artificial sunlight, vibrators, curling irons and hair driers were run by electricity from the house supply. This firm of electrical manufacturers of such a varied supply finds its engineering department more and more called upon by architects and builders.

Messrs. G. A. Harvey & Co. (London) Ltd., in an interesting booklet published under the title of *Steel Plate and Constructional Work*, describe and illustrate some of the many diverse types of riveted and electrically welded work carried out by the firm's steel plate constructional department. The firm specialize in hydraulically riveted or electrically welded steel plate work up to 1½ in. thick. In the foreword to the booklet the firm claim to have one of the most efficient and up-to-date plants for economical production, and that some of the special machinery is the only example of its kind in the United Kingdom. Among the many forms of industrial equipment the firm have produced are: Storage vessels, stills, condensers, cylinders, etc., for ammonia recovery, benzole, chemical and creosoting plants, water softening plant, bulk oil installations, storage tanks up to 116 ft. diameter, hydraulic pressings, structural steel work, bunkers and vulcanizing pans.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Swimming Bath, Stoke Newington (pages 569–573). General contractor, Albert Monk. Sub-contractors: Paterson Eng. Co., Ltd., aeration and filtration; Colley Meikle & Co., Ltd., heating and steam plant; Jacob, White & Co., Ltd., electrical work; Carter & Co., Ltd., wall linings and terrazzo; Farnley Iron Co., Ltd., glazed bricks and bath lining; Starkie Gardner, Ltd., ornamental balustrade to gallery; Adamsez, Ltd., sanitary goods; G. A. Harvey & Co. (London), Ltd., radiator guards in bath hall; W. and R. Leggott, Ltd., commemorative tablet in entrance hall; A. Jones Lock Co., dressing-box fittings and ironmongery; L. Bysouth and Sons, stonework; A. Thorpe, stone carving; Morris, Singer & Co., leaded light coat-of-arms; Henry Hope and Sons, Ltd., steel sashes and electrical sash-opening gear; David Rowell & Co., Ltd., ventilators; Considere Construction, Ltd., reinforced concrete designers.

The George Hotel, Burslem (pages 574–577). General contractors, T. Godwin and Sons. Sub-contractors: Trussed Concrete Steel Co., Ltd., Reinforced Concrete Engineers, reinforced concrete and fireproof construction; Colliers (Reading), facing bricks; A. D. Dawnay and Sons, Ltd., structural steel; Ames and Finnis, tiles; Pilkington Bros., Ltd., glass; Mellowes & Co., Ltd., patent glazing; Hollis Bros. & Co., wood-block flooring; White's Hygeian Rock Co., waterproofing materials; Saunders and Taylor, central heating; Bratt Colbran & Co., stoves, grates and electric heating; Saunders and Taylor, Ltd., boilers; Bagues, Ltd., Best and Lloyd, Ltd., and Woodfyt Sales, electric light fixtures; A. Wood & Co., and Twyfords, Ltd., sanitary fittings; J. and H. Patteson, Ltd., stairtreads, window furniture and marble; N. F. Ramsay & Co., door furniture; Mellowes & Co., Ltd., casements; Colman & Co., revolving doors; G. Jackson and Sons, Ltd., decorative plaster; Durose and Son, metalwork; A. Wood, tiling; Merchant Trading Co., Ltd., Salubra wallpapers.

Children's Nursery School, Eagling Road, Bow, E.3 (pages 582–583). General contractors, Griggs and Sons. Sub-contractors, Messrs. Stuarts Granolithic Co., Ltd., artificial stone; Broadhurst Craig, heating; Beaven and Sons, Ltd., lighting; Doulton & Co., Ltd., glazed stoneware; H. Pontifex and Sons, Ltd., sanitary fittings; Art Pavements and Decorations, Ltd., and Van Straaten & Co., floor and wall linings; Bloxam and Scuffell and Haywards, Ltd., fire-escape stairs, gates and staircase balustrade; Mander Bros., paint; Lawford and Sons, Ltd., asphalt; Hammond and Champness, lift.

House at Neston (pages 590–591). General contractors, Henry Norman and Son.

ANNOUNCEMENTS

The partnership between Messrs. George Anag, F.R.I.B.A., and George Hornblower, F.R.I.B.A., has been dissolved. Mr. Anag will practise on his own account at 7 Great James Street, Bedford Row, W.C.1.

Mr. E. Stone Collins, F.R.I.B.A., has taken into partnership Mr. Brian S. Roberts, nephew of the late Mr. Ralph Knott. The practice will be carried on as before, under the name of Knott and Collins, at 14 John Street, Adelphi, W.C.2.

By virtue of the Merchandise Marks (Imported Goods) No. 1 Order, 1930, all imported roofing slates sold or exposed for sale on or after June 28, 1930, must bear an indication of origin, applied to each slate by stamping, stencilling, or otherwise painting.

THE ARCHITECTS' DIARY

WEDNESDAY, APRIL 9

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Architectural Examinations Committee. Annual General Meeting of the South-Eastern Society of Architects. 4.30 p.m. **5 p.m.**

ARCHITECTURE CLUB, 229 Strand, W.C.2. At the Architectural Association, 34 Bedford Square, W.C. Supper discussion on "Relation of Sculpture to Architecture." Supper, 7.45 p.m. Discussion, 8.3 p.m. **7.45 p.m.**

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W.1. "Preserving our Heritage." By Clough Williams-Ellis, F.R.I.B.A. Hon. Humphrey Pakington, A.R.I.B.A., will occupy the chair. **8 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. Informal Meeting. "Recent Developments in Railway Permanent-way Practice, with particular reference to the Use of Metal Sleepers." By Samuel T. Dutton, M.INST.C.E. Sir Clement D. M. Hindley, K.C.I.E., will preside. **6 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Exhibition of Photographs of Continental Sculpture. 10 a.m. to 6 p.m. Until April 17. **10 a.m.**

MANSARD GALLERY, 196 Tottenham Court Road, W.1. Exhibition of Modern Glass and Colour Prints, Mansard Annexe. Exhibition of Landscape Painting. Open until April 17.

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields. W.C. 2. Open every Tuesday, Wednesday, Thursday, and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

IDEAL HOME EXHIBITION, Olympia, W. Organized by *The Daily Mail*. Open until April 17.

THURSDAY, APRIL 10

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Architectural Education Prizes and Scholarships Committee. **4.30 p.m.**

ARCHITECTURAL ASSOCIATION. Dinner to Robert Atkinson, to be held at the Criterion Restaurant, Piccadilly, W.1. **7.30 p.m.**

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. General Meeting. "Liverpool Cathedral." By Rev. Canon W. Thompson Elliott, M.A., Vicar of Leeds. (Lantern Illustrations.) **7 p.m.**

WORSHIPFUL COMPANY OF PLUMBERS. At the King's College, Strand, W.C.2. "London's New Drainage By-laws." By E. Thomas Swinson. The Master of the Company will preside. **7.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. "Surge Investigations on Overhead Lines and Cable Systems." By S. W. Melsom, A. N. Arman, B.SC. (ENG.), and W. Bibby, B.SC. (ENG.). (Light Refreshments at 5.30 p.m.) **6 p.m.**

INSTITUTION OF WELDING ENGINEERS, 30 Red Lion Square, W.C.1. "Some Interesting Arc-Welded Jobs." By H. B. White and R. Tuddenham. (Lantern Illustrations.) **7.30 p.m.**

NORTHERN POLYTECHNIC, Holloway, N.7. Department of Architecture, Surveying and Building. Annual Speech Night. **7 p.m.**

FRIDAY, APRIL 11

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Excursion to Motor Vehicle and Engine Works of Messrs John I. Thornycroft, Basingstoke.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Modern Civilisation in the Countryside." By J. M. Kennedy. Professor Percy Dearmer, D.D., will occupy the chair. **8 p.m.**

ROYAL SANITARY INSTITUTE. At the Town Hall, Chatham. Sessional Meetings. Tea 4 p.m. Discussion on "Modern Elementary School Construction," to be opened by R. L. Honey, F.S.I., M.INST.M. and CY.E.; and "Special Difficulties in Housing," to be opened by T. Topping, F.S.I.A. Edward Willis, M.INST.C.E., F.S.I., M.INST.T., will preside. 4.30 p.m. **4 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Address by Colonel Sir T. F. Purves, O.B.E., President of the Institution. **6.15 p.m.**

BOROUGH POLYTECHNIC INSTITUTE, Borough Road, S.E.1. Annual Exhibition of Students' Work. 6 to 9 p.m. **6 p.m.**

SATURDAY, APRIL 12

Sunrise, 5.13 a.m. Sunset, 6.50 p.m.

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. Visit to St. Albans. (2s. 6d. return.) Meet at rear entrance of Guildhouse at 2.30 p.m. **2.30 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the Royal Courts of Justice, Strand, W.C.2. **2.30 p.m.**

ROYAL SANITARY INSTITUTE. At the Town Hall, Chatham. Meet at Town Hall for visits to the Rochester and Chatham Joint Sewerage Works, the Royal Naval Hospital, and to a certified Milk Farm and Pasteurization Plant. **10 a.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Deptford Power Station of the London Power Co. **2.30 p.m.**

BOROUGH POLYTECHNIC INSTITUTE, Borough Road, S.E.1. Annual Exhibition of Students' Work. 2.30 to 9.30 p.m. **2.30 p.m.**

SUNDAY, APRIL 13

GUILDHOUSE FELLOWSHIP, Guildhouse, Eccleston Square, S.W. 1. "Sunlight." By Dr. C. W. Saleeby, F.R.S.E. Clare Greet (Miss) will occupy the chair. **3.30 p.m.**

MONDAY, APRIL 14

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "The Decentralization of Industry." By Dr. Raymond Unwin. **5 p.m.**

CARPENTERS' COMPANY, Carpenters Hall, E.C.2. "The Preservation of St. Paul's Cathedral." By Canon Alexander. The Lord Bishop of London will preside.

INSTITUTION OF ELECTRICAL ENGINEERS. North-Eastern Centre. At the Armstrong College, Newcastle-on-Tyne. Annual General Meeting. Mersey and North Wales (Liverpool) Centre. At the Laboratories of Applied Electricity, The University, Liverpool. Annual General Meeting. Both meetings will be held at 7 p.m. Western Centre. At Cheltenham. "The Heating of Buildings Electrically by means of Thermal Storage." By Lt.-Col. S. E. Monkhouse, R.E. (T.R.) and L. C. Grant. **7 p.m.**

TUESDAY, APRIL 15

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Visit to India Buildings. Meet at the Brunswick Street entrance at 2.15 p.m. **2.15 p.m.**

WEDNESDAY, APRIL 16

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Ultra-Violet Ray Transparent Window Glass." By S. English. **8 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. "Weymouth: Bincleaves Firing Station; Repairing and Strengthening of Reinforced-Concrete Pier." By Peter A. Scott, B.SC., STUD.INST.C.E. F. E. Wentworth-Shields, O.B.E., M.INST.C.E., will preside. **6.30 p.m.**

THURSDAY, APRIL 17

IDEAL HOME EXHIBITION, Olympia, W. Last day of the exhibition organized by *The Daily Mail*.

GOOD FRIDAY, APRIL 18

R.I.B.A., 9 Conduit Street, W.1. Office and Library closed until Tuesday, April 22 (inclusive).

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Five-day Tour to Amsterdam.

SATURDAY, APRIL 19

Sunrise, 5.57 a.m. Sunset, 8.2 p.m.

EASTER MONDAY, APRIL 21

WEDNESDAY, APRIL 23

KING'S COLLEGE, Strand, W.C.2. College term begins. **10 a.m.**

THURSDAY, APRIL 24

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. Exhibition of Architects' Drawings of 1800–1850. 10 a.m. till 8 p.m. Saturdays 10 a.m. till 5 p.m. Exhibition closes on May 24. **10 a.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Architecture in its Relation to Modern Life." By Alfred C. Bossom, F.R.I.B.A. **6.30 p.m.**

FRIDAY, APRIL 25

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

TOWN PLANNING INSTITUTE, Caxton Hall, Caxton Street, Westminster, S.W.1. "Road Surface Design." By G. L. Pepler, F.S.I. To be followed by a discussion. **6 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. West Wales (Swansea) Sub-Centre. "Surge Investigations on Overhead Line and Cable Systems." By S. W. Melsom, A. N. Arman, B.SC. (ENG.), and W. Bibby, B.SC. (ENG.).

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the works of Kodak, Ltd., Wealdstone. **2.15 p.m.**

SATURDAY, APRIL 26

Sunrise, 5.43 a.m. Sunset, 8.14 p.m.

MONDAY, APRIL 28

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Architects' Drawings of 1800–1850." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. 8 p.m. Meeting of the Executive Committee. **4 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. General Meeting. "Aerial Surveying and Archæology." By O. S. G. Crawford. 8 p.m. Exhibition of Wall Papers. 10 a.m. till 10 p.m. **10 p.m.**

NATIONAL FEDERATION OF RETAIL FURNISHERS, 11 Tavistock Square, W.C.1. Annual Dinner to be held at the Trocadero Restaurant, W.1.

TUESDAY, APRIL 29

R.I.B.A., 9 Conduit Street, W.1. Last day for receiving applications for the Intermediate Examination.

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the Armourers' and Brasiers' Company, 81 Coleman Street, E.C.2. **3 p.m.**

LONDON UNIVERSITY Term begins. **10 a.m.**

WEDNESDAY, APRIL 30

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Annual General Meeting. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

THURSDAY, MAY 1

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Annual General Meeting. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S.

FRIDAY, MAY 2

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Meter and Instrument Section. "The Metering Arrangements for the 'Grid' Transmission System in Great Britain." By C. W. Marshall, B.SC. **7 p.m.**

SATURDAY, MAY 3

Sunrise, 5.30 a.m. Sunset, 8.24 p.m.

TUESDAY, MAY 6

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Luminous Traffic Signals." By T. Austin. (Light refreshments at 6.30 p.m.) **7 p.m.**

THURSDAY, MAY 8

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. Ordinary and Annual General Meetings. **6.30 p.m.**

FRIDAY, MAY 9

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual General Meeting. "The Rotary Automatic Telephone System." By J. W. Moffatt and J. C. Emerson. **6.15 p.m.**

SATURDAY, MAY 10

Sunrise, 5.18 a.m. Sunset, 8.36 p.m.

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Annual General Meeting. Address by G. C. Laurence, F.R.I.B.A., R.W.A., Chairman of Allied Societies Conference. **6.15 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 12

R.I.B.A., 9 Conduit Street, W.1. Ninety-Sixth Annual General Meeting. **8 p.m.**

WEDNESDAY, MAY 14

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Annual Dinner at the Hotel Victoria, Northumberland Avenue, W.C.2. The Earl of Crawford and Balcarres will preside. 7.30 for 7.45 p.m. (Tickets 12s. 6d. each.) **7.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art to be opened by the Archbishop of Canterbury.

LONDON UNIVERSITY Presentation Day. Albert Hall. **2.30 p.m.**

THURSDAY, MAY 15

R.I.B.A., 9 Conduit Street, W. 1. Annual Dinner to be held at the Guildhall, E.C.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C. 2. Annual General Meeting. 6 p.m. Irish Centre (Dublin). At the Physical Laboratory, Trinity College, Dublin. Annual General Meeting, 7.45 p.m. Hampshire Sub-Centre. At Southampton, Summer Meeting. **6 p.m.**

FRIDAY, MAY 16

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Technical College, Dundee. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S. **7.30 p.m.**

SATURDAY, MAY 17

Sunrise, 5.6 a.m. Sunset, 8.47 p.m.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C. 2. London Students' Section. Second visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 19

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C. 1. General Meeting. "The Architectural Association, 1847-1930." By F. R. Yerbury. (Lantern Illustrations.) Exhibition of Architecture of Bloomsbury. Until June 14.

WEDNESDAY, MAY 21

ROYAL SOCIETY OF ARTS, John Street, Adelphi. W.C. 2. Ordinary Meeting. **8 p.m.**

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Foundation Co., Ltd., is to erect an electrical sub-station for the London Electric Supply Corporation, Ltd., at Swan Lane, BERMONDSEY.

The BERMONDSEY B.C. has passed revised plans for the proposed disinfecting station, the cost being estimated at £24,390.

The BERMONDSEY B.C. is acquiring land at Acorn Yard from the Port of London Authority, for a rehousing scheme, which will cost £7,000.

The CATERHAM U.D.C. is to undertake a drainage scheme at Warlingham.

The trustees of the Church of England Schools are to remodel two schools in the CHEAM district.

The L.C.C. is to remodel the Tooting Home, Church Lane, TOOTING, at a cost of £22,500.

The L.C.C. is to invite selected firms to quote for the erection of shops and houses on the Highes Fields estate, GREENWICH.

SOUTHERN COUNTIES

The GUILDFORD Corporation has obtained sanction for a loan of £50,500, for sewage works.

The GUILDFORD Corporation has decided to invite selected firms to tender for the adaptation of premises in High Street, as municipal offices.

The GUILDFORD Corporation is informed by Onslow Village, Ltd., that it is the society's intention to proceed with its original proposals for the layout of the Henley Grove area.

The GUILDFORD Corporation Housing Committee reports that it is in communication with the Surrey C.C. with regard to the acquisition of land at Stoke Old Rectory, for the erection of houses.

Plans passed by the GUILDFORD Corporation: Two houses, Grantley Road, for Mr. W. J. Piner; alterations, Napoleon Hotel, Farnham Road, and alterations and additions, Portsmouth Road, for Messrs. Friary, Holroyd and Healy's Breweries, Ltd.; house, Ganghill Copse, for Mr. A. C. Burlingham; house, Ganghill Copse, for Onyx County Estates; organ chamber, Holy Trinity Church, for the Churchwardens; house, Warren Road, for Mrs. Crooke; two houses, Manor Road, for Mr. H. C. Watts; sixteen houses, South Road and Percy Road, Stoughton, and three houses, Harvey Road, for Mr. H. Ashenden; house, Poltimore Road, for Mr. C. Jilliard; twenty-six houses, Worplesdon Road, for Mr. R. C. Whitemore; two cottages, Albury and Manor Roads, for Mr. W. Hoptroff; garages and motor coach shelter, Epsom Road, for Mr. Bennett Andrews; two houses, Stoughton Road, for Mr. W. F. Wootton.

Plans passed at POOLE: Dwelling-house, Valley Road, for Mr. L. C. Bugden; dwelling-house, Elgin Road, for Messrs. Baker, Son and Baker; dwelling-house, Dorchester Road, for Mr. W. S. Parker; addition to dwelling-house, "Samona," Brownsea View Avenue, for Mr. G. E. Burgess; dwelling-house and garage, Canford Cliffs Road, for Mr. E. F. Knight; two dwelling-houses, Whitefield Road, for Mr. G. R. Wilson; dwelling-house, Caledon Road, for Mr. H. Ventress; dwelling-house and garage, Alton Road, for Mr. E. de Wilde Holding; dwelling-house, Twemlow Avenue, for Mr. C. R. B. Green; two dwelling-houses off Hunt Road, for Messrs. Corbin and Clark; dwelling-house, Palmerston Road, for Messrs. Fancy Bros.; dwelling-house, Stanley Green Road, for Messrs. E. W. Kingsbury and Sons; dwelling-house, Pearce Avenue, for Mr. D. A. Wood; dwelling-house, Ringwood Road, for Messrs. Corbin and Clark; ten dwelling-houses, St. Osmund's Road, for Mr. F. de Wilde Holding; two pairs semi-detached dwelling-houses, Moseley Avenue, for Messrs. Opperman and Jones; dwelling-house, Caledon Road, for Mr. G. R. Wilson; dwelling-house, Hennings Park Road, for Mrs. A. Golding; dwelling-house, Harbour Hill Road, for Messrs. Brailsford and Wood, Ltd.; dwelling-house and garage, Widdicombe Avenue, for Messrs. W. Hoare and Sons; dwelling-house, Harbour Hill Road, for Messrs. W. G. Crane and Son; two dwelling-houses, Harbour Hill Road, and dwelling-house, Harbour Hill Road, for Mr. J. Jagger; four dwelling-houses, Alder Road, for Mr. C. R. Symonds; dwelling-house, Livingstone Road, for Mr. M. J. Lawford; alterations and additions, 80 High Street, for Messrs. F. W. Woolworth & Co., Ltd.; dwelling-house, Lulworth Avenue, for Mr. G. Miles; dwelling-house off Hunt Road, for Mr. S. E. Bracher; dwelling-house, Albert Crescent, for Mr. G. H. Fisher; dwelling-house, Frankland Crescent, for Mr. A. G. Gray; dwelling-house, Stanley Green Road, for Mr. J. Wood; pair semi-detached dwelling-houses, Houlton Road, for Mr. H. Ventress; dwelling-house, Victoria Road, dwelling-house, Ringwood Road, two dwelling-houses, Livingstone Road, for Mr. M. J. Lawford; dwelling-house, Caledon Road, for Messrs. Watton Bros.; two dwelling-houses, Cranbrook Road, for Mr. J. Francis; dwelling-house, Ringwood Road, for Mr. H. J. Rogers; workshop and offices, Tatnam Road, for Mr. F. G. Pearcy; dwelling-house, off Uppleby Road, for Mr. F. G. Nutt; dwelling-house, Canford Cliffs Road, for Mr. E. F. Knight; pair semi-detached dwelling-houses, Binnie Road, for Messrs. Philpotts and Manners.

SOUTH-WESTERN COUNTIES

The BRISTOL Corporation has obtained a site in Filton Avenue, Horfield, for the erection of a branch library.

The PLYMOUTH Corporation has asked the town clerk and borough engineer to report with regard to the construction of an arterial road from Tavistock Road via Mill Street, Willow Plot, to Derry's Clock, the acquisition of property adjacent to the market, the reconstruction of the market thereon, and the development of the present market site as a high-class shopping centre.

Plans passed by the PLYMOUTH Corporation: Two houses, new street, Higher Compton, for Mr. M. Oliver; new club premises, Barne Road, for the trustees of St. Budeaux working men's club; reconstruction of tenement, 5 Trafalgar Place, for Mr. W. H. Webb; alterations, Albion and Continental Hotels, Millbay Road, for Trust Houses, Ltd.; alterations, 18 and 19 Old Town Street, for Messrs. F. W. Woolworth, Ltd.; two houses, Venn Grove, for Mr. J. H. Dyer.

NORTHERN COUNTIES

The BIRKENHEAD Brewery Co. is to erect an hotel at Meols.

The BOLTON Corporation has asked the borough engineer to prepare plans for the erection of conveniences in Chorley Old Road.

The BOLTON Education Committee is negotiating for a site for the new technical college.

Messrs. Stott and Sons, architects, have prepared schemes for the erection of houses on land in Hulton Lane and Hawthorne Road, BOLTON.

The Board of Education has approved plans submitted by the BOLTON Education Committee of the proposed additions at the Lostock Open-air School, to provide accommodation for 200 residential scholars. The estimated expenditure will not exceed £7,475.

The BOLTON Corporation is to invite tenders for the erection of a new sessions hall, library, museum and art gallery, and extensions to the existing town hall in accordance with plans, specifications and bills of quantities prepared by Messrs. Bradshaw, Gass and Hope, architects.

Plans passed by the BOLTON Corporation: Six houses and three garages, Sharples Avenue, for Messrs. A. H. Price and Groves; eight houses, Verdure Avenue, for Mr. A. S. Woods; eight houses, Boot Lane, for Messrs. S. Newsome and Sons; eight houses, off New Church Road, for Messrs. T. P. Smith, Ltd.; two houses, Crompton Way, for Messrs. Leigh Brothers, Ltd.; two houses, Delph Hill, Chorley Old Road, for Mr. A. Lewis.

The BRADFORD Education Committee has approved plans, prepared by the city architect, for a new manual and domestic centre to be erected at Marshfield School.

The HULL Corporation has provisionally agreed upon a site for the erection of a depot for the electricity department.

The HULL Corporation is to obtain tenders for the three blocks of flats to be erected on the area of the New George Street improvement scheme.

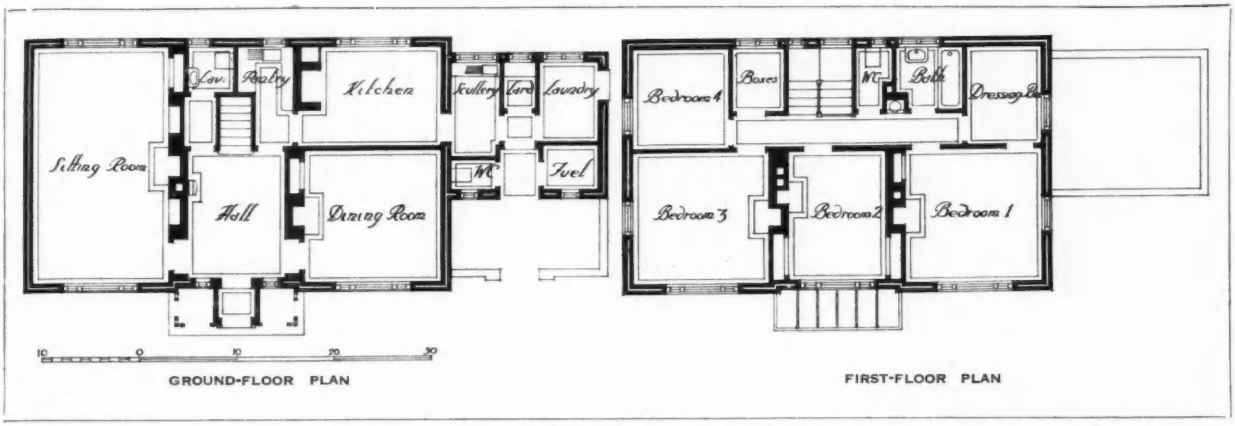
The Rev. S. C. Radley has obtained a site at the corner of Preston Street and Bilton Road, HULL, for the erection of a church.

Plans passed by the HULL Corporation: Twelve houses, James Reckitt Avenue, for Mr. R. Finch; twelve houses, off Gillshill Road, for Mr. S. Bays; two houses, Ellesmere Avenue, for Mr. F. Singleton; four shops, Ings Road, for Messrs. G. T. Spruit and Son; sixteen houses, Gillshill Road, for Mr. R. Ashton; new streets, First Lane, Hessle, for Mrs. L. Schollar; two houses, Belfield Avenue, for Mr. E. Pickering; eighteen houses, Silverdale Road, for Mr. W. Garbutt; eighteen houses, Strathmore Avenue, for Messrs. Loveridge and Taylor; seven houses, off Willerby Road, for Mr. C. Johnson; club and house, Inglemire Lane, for Mr. W. Graney; eight houses, Bricknell Avenue, for Mr. H. Sanderson; four houses, Strathmore Avenue, for Mr. E. Mowforth; two houses, Goddard Avenue, for Messrs. Camp and Sanderson; boiler house and extensions, National Avenue, for National Radiator Co.; four houses,





House at Neston, Wirral. Designed by Campbell and Honeyburne. The main front; and the entrance hall. The external walls are of rustic bricks and the roof is covered with rustic tiles. The doors on either side of the staircase give access to the lavatory and the kitchen and pantry, respectively. *For ground- and first-floor plans, see page 591.*



House at Neston, Wirral. Designed by Campbell and Honeyburne. Ground- and first-floor plans. The entrance hall gives on to the sitting- and dining-rooms; the kitchen, access to which is obtained through the door on the right-hand side of the staircase, adjoins a one-story annexe containing the scullery, laundry, etc. On the first floor are four bedrooms, bathroom, boxroom and lavatory accommodation.

Green Style Lane, Swanland, for Mr. J. B. Robinson; six houses, Bricknall Avenue, for Mr. T. R. Barnett; sixteen houses, Hall Road, for Messrs. R. W. and J. H. Barnett; two houses, Boothferry Road, for Mr. F. Curson; three houses, First Lane, Hessle, for Mrs. L. Schollar; five shops, Inglemire Lane, Hall Road, for Messrs. R. W. and J. H. Barnett; nine shops, Spring Bank West, for Mr. W. Elliott; thirteen houses, Cottingham Road, for Messrs. Moore and Arundell; nineteen houses and eight shops, Beverley High Road, for Mr. F. R. Waller; two houses, Packham Lane, Kirk Ella, for Mr. G. T. Rignall; four shops, Palmers Field Estate, Anlaby Common, for Garden Village Developments, Ltd.; three shops, Inglemire Lane, for Mr. J. M. Bladon.

Plans passed by the ILKESTON Corporation: Two bungalows, Manners Avenue, for Messrs. Briggs Bros.; bungalow, Kingsway, for Mr. E. Cope; house, Derby Road, for Mr. G. J. Holding; two houses, Church Street, for Messrs. J. W. Stapleton and Son; extensions, Nelson Institute, Nelson Street, for Mr. A. Chadwick; house, Drummond Road, for Mr. J. Godber; alterations to shop and premises, Bath Street, for Messrs. Woolliscrofts; houses, Derby Road, for Mr. I. Winson.

The LEEDS Education Committee is to erect a temporary school in King Lane, Moortown.

The LEEDS Education Committee has obtained a site in Scott Hall Road on the Potternewton estate, for the erection of an elementary school.

The LEEDS Corporation has obtained sanction for a loan of £27,000, for the erection of flats and houses on the Southfield estate.

The LEEDS Corporation has sold the island site at the junction of St. Peter's Street and the new street from Vicar Lane to Appleyard of Leeds, Ltd., subject to the erection of buildings from the design of Sir Reginald Blomfield.

Plans passed by the LEEDS Corporation: Twenty-two garages, Sutherland Avenue, for Shaftesbury Motors, Ltd.; four shops, Ivy Grove, for Mr. H. V. Waite; four houses and shops, Easterly Road, for Messrs. Lax Brothers.

The LEEDS Corporation has sold land on the York Road and Selby Road housing estate to the Yorkshire Association of Baptist Churches and Home Mission or Itinerant Society (Incorporated), as a site for a church.

Plans passed by the MANCHESTER Corporation: Additions to Roman Catholic Church, Levenshulme Road, Gorton; alterations to bank (revised plan), 354 Ashton New Road and Grey Mare Lane, Bradford; alterations and additions, Crown Inn, Byrom Street and Grove Street; showroom, meeting room and offices, Queen's Road, Hough Street and Wilson Street, Miles Platting; 478 houses, Briscoe Lane, etc., Newton Heath Housing estate; Northern Hospital, Cheetham Hill Road and Alms Hill Road, Cheetham; café, Lena Street, Piccadilly; alterations, 6, 8 and 10 Cross Lane and Rosenburgh Street, Gorton; additions to Sunday School, Wellington Street, Gorton; revised plan of steelwork to cinema and café, Withington Road and Dudley Road, Whalley Range; pavilion, St. Werburgh's Road, Chorlton-cum-Hardy; fourteen houses, Waller Avenue and Wellington Road, Fallowfield; ten houses, Leicester Road and Hawkeshead Road, Cheetham; eleven houses, Northfield Road, New Moston; sixteen houses, Whiston Road and Granville Road, Crumpsall; rebuilding Red Lion Hotel, Wilmslow Road, Withington; church, Erskine Road and Walker Road, Blackley; four shops and houses, Dickenson Road and Albert Place, Rusholme; thirty houses, Saxon Avenue, Crumpsall; seven houses, Coldstream Avenue, Blackley; eleven houses, Northfield Road, New Moston; sixteen houses, Whiston Road and Granville Road, Crumpsall; ten houses, Leicester Road and Hawkshead Road, Cheetham; sixteen houses, Grosvenor Road and Belgrave Road; Crumpsall; nine houses, Yew Tree Road, Fallowfield.

The MANCHESTER Corporation has obtained land for the extension of the East Gorton branch library.

The MANCHESTER Corporation is negotiating for land at Collyhurst, for the erection of a public washhouse.

The MANCHESTER Corporation Town Planning Special Committee has passed plans for the erection of a cinema at Chestham Hill Road.

The MANCHESTER Education Committee has obtained sanction to borrow £20,500, for the erection of a municipal school at Mauldeth Road.

The Ministry of Health has approved the proposals of the OLDHAM Corporation for the erection of administrative and staff blocks at the Strinesdale Sanatorium, subject to certain alterations.

Plans passed by the OLDHAM Corporation: Bungalow, Everton Avenue, for Miss A. M. Lowe; new school, Limeside, for the Oldham Education Committee; alterations "Old Bent Hall," 166 West Street, for Messrs. W. T. Rothwell, Ltd.; shop, Market Place, for Messrs. W. and J. Wallace, Ltd.; alterations to premises, Hollins Road, for Mr. N. Wild.

The OLDHAM Corporation Gas Committee recommends a scheme, prepared by the engineer, for the reconstruction of the Higginshaw gasworks, at an estimated cost of £170,000 and the laying of a boosting main between Higginshaw, Central and Hollinwood gasworks, at an estimated cost of £34,000.

The SHEFFIELD Corporation has authorized the city architect to proceed with the erection of additional parlour-type houses on the Longley and Dykes Hall estates.

The SHEFFIELD Corporation has obtained sanction to borrow £29,049 for the erection of seventy-seven houses on the Wisewood estate, and £3,404, for the erection of six house-shops on the Wybourn estate.

Plans passed by the SHEFFIELD Corporation: Two houses, Whirlowdale Crescent, for Mr. J. A. Wragg; five houses, Dixon Road, for Messrs. H. and A. Simpson; four houses, Montrose Road, for Mr. J. W. Bailey; four houses, Retford Road, for Messrs. W. and E. Sadler, Ltd.; two houses, Ben Lane, for Mr. F. Lamb; house, shop and garage, Hutcliffe Wood Road, for Mr. R. Harrison; six houses, Birch Farm Avenue; four houses, Strelley Avenue, for Mr. J. T. Redmile; sixteen houses, Strelley Avenue, for Messrs. J. Marsh and Son; two houses, Crimicar Lane, for Messrs. A. J. Mackenzie, Ltd.; three houses and garages, Rupert Road, for Mr. W. A. Wright; seven houses and sale-shops, Dykes Lane, Norris Road and Ellenboro Road, for Mr. W. J. Patchett; two houses, Bents Road, for Mr. S. G. Bailey; two houses, Ben Lane, for Mr. A. Condell; four houses, Longley Lane, for Messrs. Oxspring Bros.; two houses, Highcliffe Road, for Mr. Riley Watson; two houses, Herries Road, for Mr. J. Maxfield; two houses, Halesworth Road, for Mr. D. Hurrell.

Plans passed by the STRETFORD U.D.C.: Ten houses, Milwain Road, for Messrs. Archer and McAlpin; milk depot, Mildred and Lester Streets, for Messrs. Manchester and Salford Equitable Co-operative Society, Ltd.; alterations to warehouse, Third Avenue, for Northern Motor Utilities, Ltd. and Messrs. W. D. Horner & Co., Ltd.; offices and workshops, Chester Road, for Messrs. C. W. Scrouther & Co.; loading shelter, Twelfth Street, for Messrs. Brown and Tawse Tubes, Ltd.; alterations, rear of 724 Chester Road, for Messrs. Cotton Storage Co., Ltd.; new hall, St. Cuthbert's Church, Trafford Park, for the churchwardens; crane gantry, Trafford Park Road, for Messrs. Royce, Ltd.

The TYNEMOUTH Corporation is considering a scheme for adapting the Plaza premises, as shelters, conveniences, etc., at a cost of £6,600.

The YORK Corporation has obtained sanction to borrow £42,500 for the erection of 100 additional houses on the Burton estate.

Plans passed by the YORK Corporation: Garage, Barbican Road, for West Yorkshire Road Car Co., Ltd.; house, Heworth Green, for Mr. G. P. Anderson; house, Heworth Green, for Mr. J. A. Richardson; layout of estate, Huntington Road, for Messrs. Culliford and Tindall; house and shop, 177 Burton Lane, for Messrs. H. Colman and Sons, Ltd.; warehouse, Lady Peckitt's Yard, for Messrs. W. Dove and Sons, Ltd.; additions, 29 Castlegate, for Messrs. Whittaker and Sons, Ltd.; miniature rifle range, Clifton, for the governors of St. Peter's School; additions, 72 Goodramgate, for the Home and Colonial Stores, Ltd.; two houses, Barmby Avenue, for Messrs. H. Fredericks and J. Hourigan; four houses, Huntington Road, for Mr. A. Jackson; conversion of house into five flats, 16 St. Saviourgate, for York House Improvement Society; two houses, Shipton Road, for Clifton Estates, Ltd.; four houses, Muncaster Estate, for Mr. Denby Collins; two houses, Stockton Lane, for Messrs. F. Addison and H. C. De Burgh.

SCOTLAND

Messrs. W. and G. Taylor are to erect twenty terrace houses in Paisley Road West, between Walkerburn Road and Forfar Avenue, GLASGOW.

The GLASGOW Corporation Housing Committee has passed plans of the housing director for the layout of land for the erection of thirty-six houses, at Amulree Street, Tollcross.

The GLASGOW Corporation Housing Committee has adopted the layout plan of the Netherton housing scheme, showing 222 houses.

The GLASGOW Corporation is being asked by the Western Heritable Investment Co., Ltd., for a subsidy of £12 10s. for, and a loan of 75 per cent. of the value of each of, 1,364 houses proposed to be erected at King's Park.

The GLASGOW Corporation is obtaining a report as to a site for a proposed new infectious diseases hospital.

The GLASGOW Corporation has granted the Hermon Baptist Church a site at Govanhill, for the erection of a church.

The GLASGOW Corporation Water Committee recommends the construction of an additional syphon pipe line from Loch Katrine across the Endrick and Blane Valleys, at a cost of £85,000.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_3	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_3	Aylesbury..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_3	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_3	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_3	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_3	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_3	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_3	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_3	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_3	Chichester..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_3	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_3	Gosport ..	S. Counties	1 5½	1 1
A_3	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_3	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_3	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_3	Pembroke..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_3	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_3	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_3	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_3	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_3	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens..	N.W. Counties	1 7	1 2½
B_3	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_3	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_3	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_3	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_3	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour ;* NAVVY, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. *each and credited when returned at* 1s. 6d.

Transport hire per day :						
Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5 ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube	0	3	0

Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6

DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.

LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* BRICKLAYER, 1s. 8½d. *per hour ;* PLUMBER, 1s. 8½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour ;* DO. *fixer,* 1s. 9½d. *per hour ;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone :			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour ;* TILER, 1s. 8½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200 :			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal :			
Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6	7 0
Grey-green do.	5	9 0
Green peggies, 12 in. to 8 in. long	4	13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour ;* JOINER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds) :			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6

PITCH PINE, add 33⅓ per cent.

FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	1½	0
Sawn laths, per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. *26 oz.*	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* "	0	2	3
DO. *6 ft. sup.* "	0	2	6
DO. *20 ft. sup.* "	0	3	1
DO. *45 ft. sup.* "	0	3	3
DO. *65 ft. sup.* "	0	3	5
DO. *100 ft. sup.* "	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. *½ in., per ft.*	0	0	6¾
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour* PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.
The measured work price is on the same basis . . . per ft. sup. £0 0 2½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, 5/32 in., grey flat per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¼ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—



A STONE FIREPLACE, WITH RECESS IN TILES, AND ARCH AND HEARTH IN BRICK: HOUSE AT DITCHLING, SUSSEX

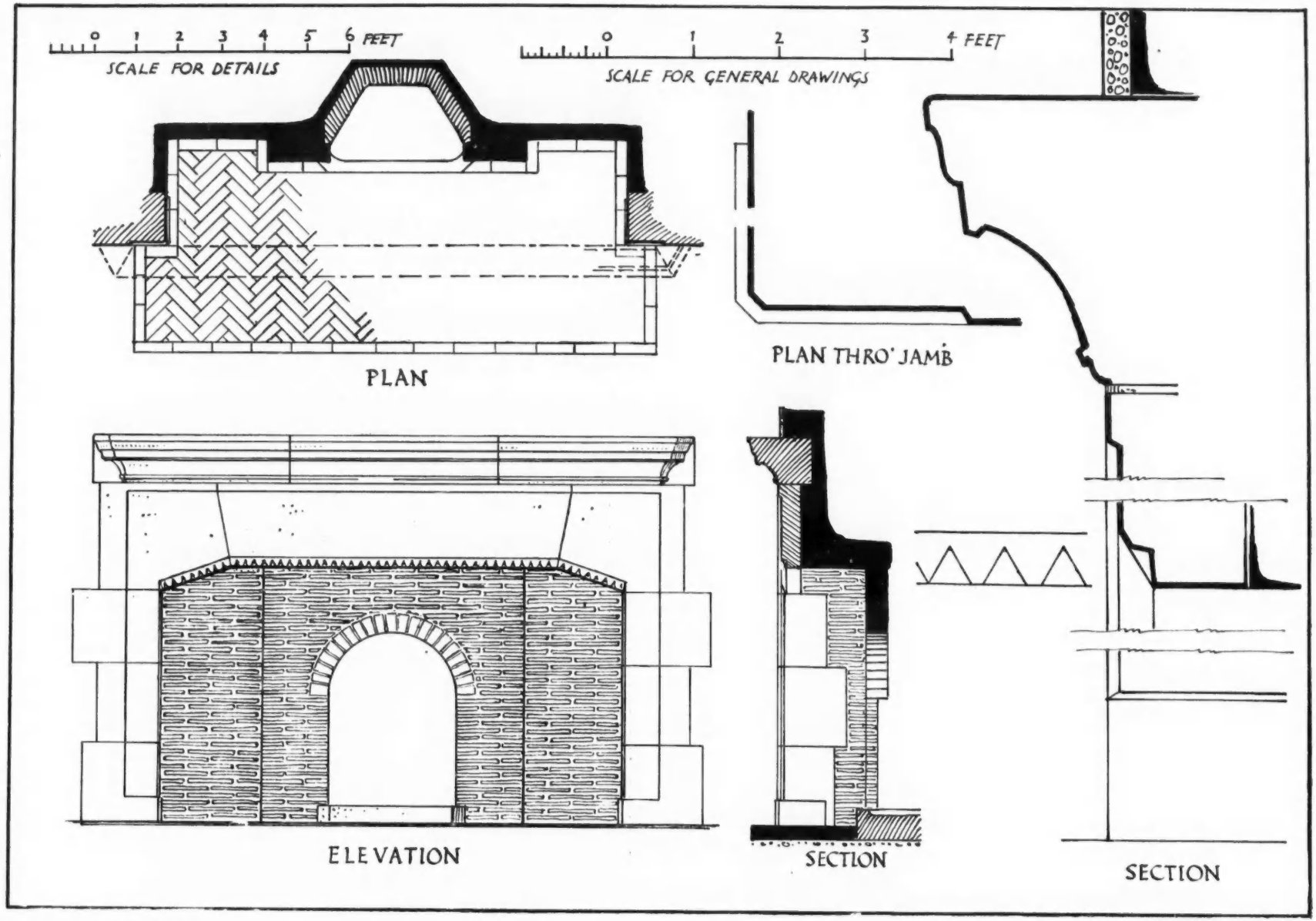
By

ARTHUR J. PENTY

IN order to combine the architectural advantages of a large open fire with the practical ones of the well type, the depth of the recess has been reduced, while the hearth is kept level with the floor.

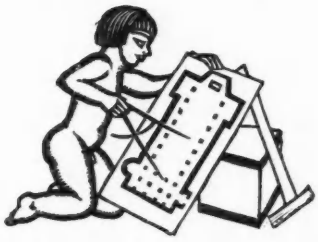
The Portland stone used for the surround is left with a boasted finish, and its face is set flush with the plaster. In building the recess, of roof tiles, the mortar used was given a desirable dark colour by mixing the lime with a dark sand, the proportion of this being determined experimentally. Moreover, the joints were kept thinner than is customary. Those of the brick arch were kept as thin as possible and, to aid this, the bricks themselves were individually cut.

Large and small scale drawings of this subject are reproduced on the following page.



For photograph, see previous page.

THE ARCHITECTS' JOURNAL



WEDNESDAY, APRIL 16, 1930

THE ARCHITECTURAL ASSISTANTS' PROBLEM

A Move towards its Solution

"This JOURNAL places its columns at the free disposal of architectural assistants . . . with the hope that it will be the first step in the reorganization of a very poor service to a highly skilled class of men."

IT is typical of this century that we should be prodigal of the classes of well-educated, finely-bred men and women, and fanatically fastidious of the welfare of the masses. This remark is not so much a statement of fact as an enlarged comparison between the means of livelihood of, say, a bricklayer and an architectural assistant. The first has sick benefit and unemployment pay, while the second relies upon his own resources if he should fall ill, and looks for employment in a market nearly entirely unorganized in so far as the best use of his valuable training and talents are concerned.

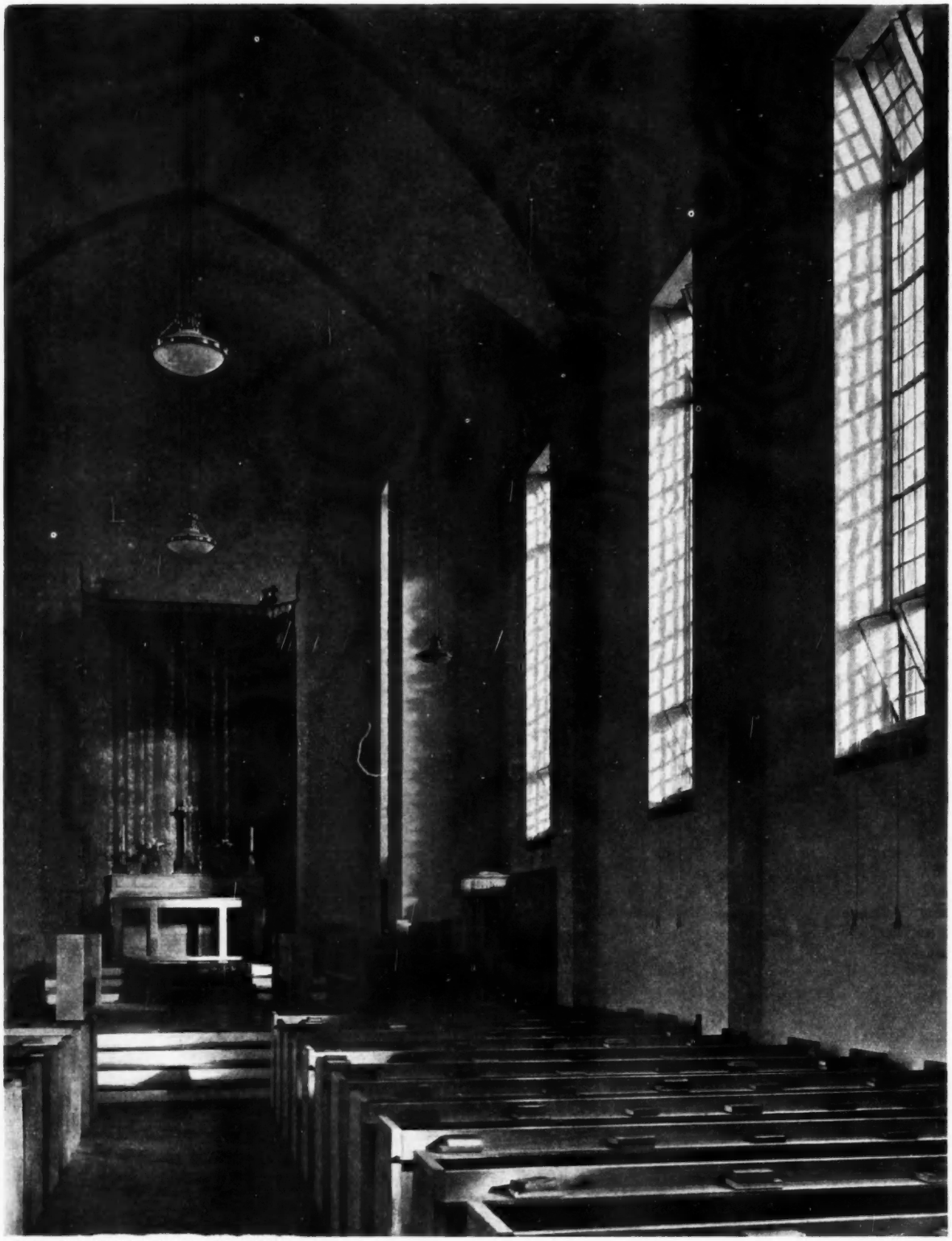
Time was when architectural offices were small half-family affairs, with one or two pupils under the principal, and one or two poorly-paid tracers. Things are very different today. In the first case the pupilage system, for better or worse, is hardly existent, and the schools train most of the young architects and the mass of architectural assistants. The training is good and turns out a great quantity of keen, inquiring minds. But when one considers how the trained men find employment it is seen how suddenly inadequate is the organization for placing them in positions, for finding them new situations, and for advancing the fortunes of those among them who are not content to become moss-bound upon one office's stool.

No one can doubt that the whole thing is precarious and uneconomical. Salaries are, of course, low; and low to men whose abilities are worth more, just because it is difficult to change from one position to another in the knowledge that the change is to be for the better. We must recognize the existence of a class of responsible assistants and cater for them as responsible men whose services are worth bidding for, and whose position as subordinates to practising architects shall not deny them salaries commensurate with their talent and abilities. It is all the more necessary that the employment organization should be good when we remember how seasonal and desultory architectural practice is liable to be. There is furious work for six months, perhaps, and then a sudden falling away. The job is done, and *ergo*—the assistants must go, so that overhead expenses may shrink again to normal.

Now, even with foreknowledge of this impending shrinkage, a draughtsman has only two or three inadequate means of finding a new job. He may place himself upon R.I.B.A. or other lists; he may write letters to or call upon busy architects; or he may pay for the insertion of an advertisement in a professional journal or in the public press.

All these methods are either slow or expensive, and impossible to many men, and it is with the object of bettering the situation which we have described that this JOURNAL places its columns at the free disposal of architectural assistants. We expect that the circulation of a list of names, with qualifications and experience clearly set down, will accelerate the healthy movement within the profession, and direct some light upon the inadequate systems at present obtaining. We are, at least, prepared to make the experiment in as generous a manner as possible, with the hope that it will be the first step in the reorganization of a very poor service to a highly skilled class of men.

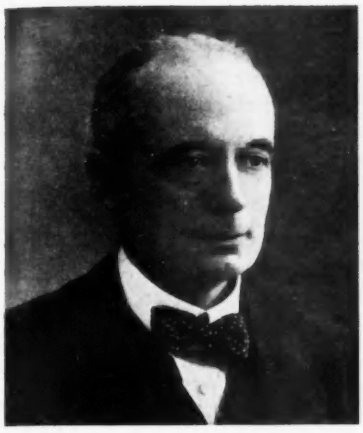
For details of THE ARCHITECTS' JOURNAL *free service, now available to architectural assistants desiring appointments, and to architects requiring to engage assistants, the reader is referred to advertisement page* xxxviii *of this issue.*



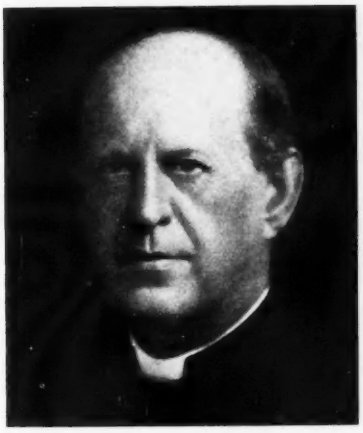
LIT BY THE LAMP OF DAY:
THE NEW CHAPEL AT SUTTON VALENCE SCHOOL

This photographic study of a recent addition to the school buildings, from the designs of Adams, Holden and Pearson, gives value to the impression of loftiness characteristic of this chapel, both within and without. The walls are washed a warm cream colour, and the finish of the oak furniture is left natural. Other illustrations, and drawings, appear on pages 601–6.

NEWS & TOPICS



Sir Henry Cautley, K.C., M.P., Chairman of the Parliamentary Committee, whose findings on the Charing Cross Bridge Bill, announced last week, were against the official scheme on the South side. A new scheme is to be found by May 6.



The Rev. Canon S. A. Alexander, Treasurer of St. Paul's Cathedral Preservation Fund, organizer of the restoration work, now approaching completion. His election as Hon. A.R.I.B.A. has just been announced.

THE VILLAIN OF THE CHARING CROSS PIECE

I VENTURE to think that never has there been a problem that required the sane outlook of architectural opinion more than has the Charing Cross Bridge scheme. When the Chairman of the Select Committee that has been examining the L.C.C. Bill regretted that he was not allowed to call more evidence from independent architects, I feel that he had reached an advanced state of irritation at the ridiculous complications which the L.C.C. advisers had landed themselves into in an endeavour to find something that pleased the Southern Railway and yet looked like a job of work. As we all know, they have been sent back to do it again, and the Chairman, a very wise man, having recognized the Southern Railway to be the villain of the piece, has said so boldly.

★

This infiltration of common sense will do some good. It has done so much good that the scheme to be will not have tunnels, will not destroy the South bank, and cannot help being less of an abortion than the scheme put forward. I wondered, as I looked at the model, how responsible men dared to advance that scheme as a solution at all. It was as full of blemishes as a sieve of holes, and Sir Edwin Lutyens could not have made architecture of it, however wisely he may have tapped his forehead in committee. He was lucky to have escaped the test.

★

It was made abundantly clear during the final stages of the Committee's proceedings that it was the conditions attaching to a financial grant from the Road Fund that had in fact carried weight with the L.C.C. in standing sponsor to the riverside site for the new station. And this, of course, was the pivot on which swung the whole clumsy contraption of roads and tunnels. A subsidy from a fund that supposedly exists for the amelioration of traffic facilities could, in fact, be invoked only for a road-system calculated to give the very negation of facility. Could anything be more crass?

WHAT WILL CHARING CROSS BRIDGE COST LONDON?

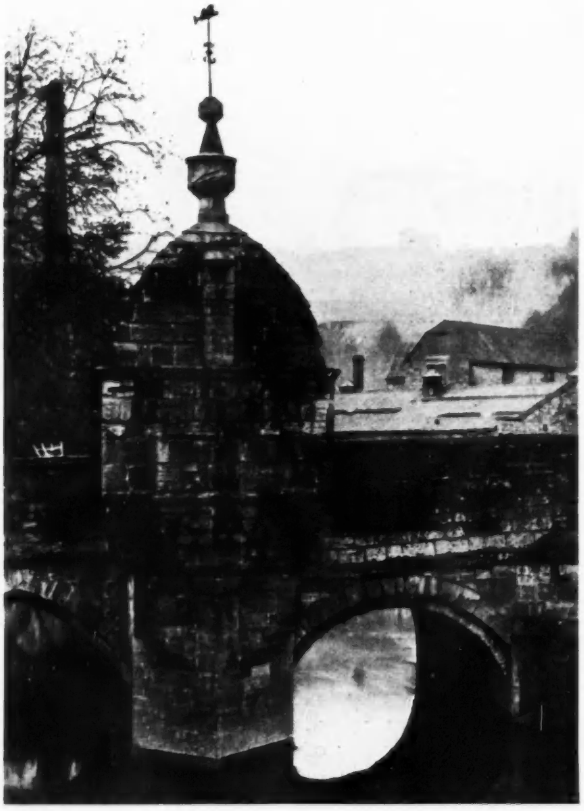
Incidentally, about one important phase of the projected scheme but meagre information was vouchsafed to the public—the cost. We have learnt to talk glibly in millions in considering a project of this magnitude, yet Sir Percy Simmons has been reported as saying that the cost to L.C.C. ratepayers would average nearly a half-penny in the £ over a term of sixty years. It will be interesting to see the calculations on which the final estimate is based.

THE DINNER TO ROBERT ATKINSON

The very large and distinguished gathering of architects at the dinner given at the Criterion on Thursday evening by the Architectural Association, in honour of Robert Atkinson, was testimony indeed, if such was needed, to the universal esteem in which the sometime Principal, and until lately Director of Education of the A.A., is held by one and all in the profession. The President of the Architectural Association, Mr. F. Winton Newman, who was in the chair, read letters of regret for absence from Sir Banister Fletcher and others, and telegrams of appreciation and good wishes from architects in all parts of the world. He then briefly sketched the varied life of Robert Atkinson, paying tribute to him as a man of many parts—architect, artist, scholar, connoisseur, and, not least, great teacher. He spoke of the unstinted service which he had given to architectural education over a period of nearly twenty years—services rendered with undoubted personal sacrifice, and given not only to the Architectural Association, but through that Association and its influence on schools throughout the country to the profession as a whole. The Chairman was supported by E. Stanley Hall, Maurice Webb, Howard Robertson and Sir Archibald Flower, who one and all testified to Robert Atkinson's great work for architectural education in this country and throughout the Empire. There followed a most amusing diversion by some old students of the A.A.

SHOULD SALARIED SURVEYORS DRAW PRIVATE PLANS?

The reply to the question of whether salaried surveyors to local authorities should be allowed to carry on private practice in their working hours seems to me to be so obvious that the subject needs no discussion. The nature of a surveyor's work is such that either he is a surveyor, whose authority over the field of activity limited by his position is absolute, or else he is a jobbing half-and-halfer, picking up work here and there, being easy with someone from whom he wants a job, and severe with someone who employs another; and generally so dividing his interests and his loyalties that his authority is enforced by means other than those due to a straightforward performance of definite duties.



A jail on a bridge: this quaint excrescence at Bradford-on-Avon was originally a chapel.

In other words, what work he gets is usually due to influence which arises out of his position as surveyor, and not out of his capabilities as a designer. It is surprising to read in a report of a discussion which took place over this question in a particular rural council, of which some account is to be given elsewhere in this issue, that the duality of practice was regarded as so usual that it was actually defended by the members of the council employing the surveyor.

ARCHITECTURE AND SCULPTURE DISCUSSED

The range of discussion was unusually wide when on Wednesday evening the Architecture Club debated the relation of sculpture to architecture for over two hours. Broadly speaking, it is the sculptor who finds the relationship sometimes strained, whilst the architect happily experiences no similar effect, since he finds it impossible to dissociate architecture from sculpture. If he conceives a building of monumental value he himself becomes a sculptor. As Darcy Braddell said, the New York skyscraper is itself a piece of sculpture, and there is no point in adding to it. As might have been expected, No. 55 Broadway was the focal point of the discussion, and lantern slides of its various sculptures were shown at the commencement of the debate. In the absence of both Mr. Pearson and Mr. Holden (owing to the recent death of their senior partner, Mr. Adams), Mr. Frank Pick found himself sole counsel for the defence, and in his most disarming manner proceeded to justify both his company and the architects, explaining the particular function of the figures, and their essential fitness, to his mind, as an outlet for the creative fancy lying concealed in this otherwise robot building. Charles Marriott summed up by likening architecture to a choral symphony, with its abstract themes which suddenly at some point or other became articulate. He considered the true function of sculpture was to make architecture more articulate.

BRADFORD-ON-AVON'S BRIDGE JAIL

A strongly-built piece of masonry has as many lives as a cat. The little jail at Bradford-on-Avon—the only jail built upon a bridge—was originally a chapel. Since then it has been a lock-up, then a toll-house, and finally, before it became a relic, it was an ammunition store—and might yet become a petrol-filling station if things were different. It is an uncouth piece of work, with its oven-like dome surmounted by a fish weather-vane of copper gilt. It used to be said of a man who spent the night in one of the two cells, that he was "under the fish and over the water"—a delicate circumlocution. ASTRAGAL

THE LATE H. PERCY ADAMS: AN APPRECIATION

H. Percy Adams was born near Ipswich sixty-four years ago. The son of a doctor, he was familiar with medical life from the beginning; this knowledge was invaluable, and accounts for his sympathetic understanding of the practical side of his work. He was articled to Binyon, an Ipswich architect, himself a pupil of Alfred Waterhouse.

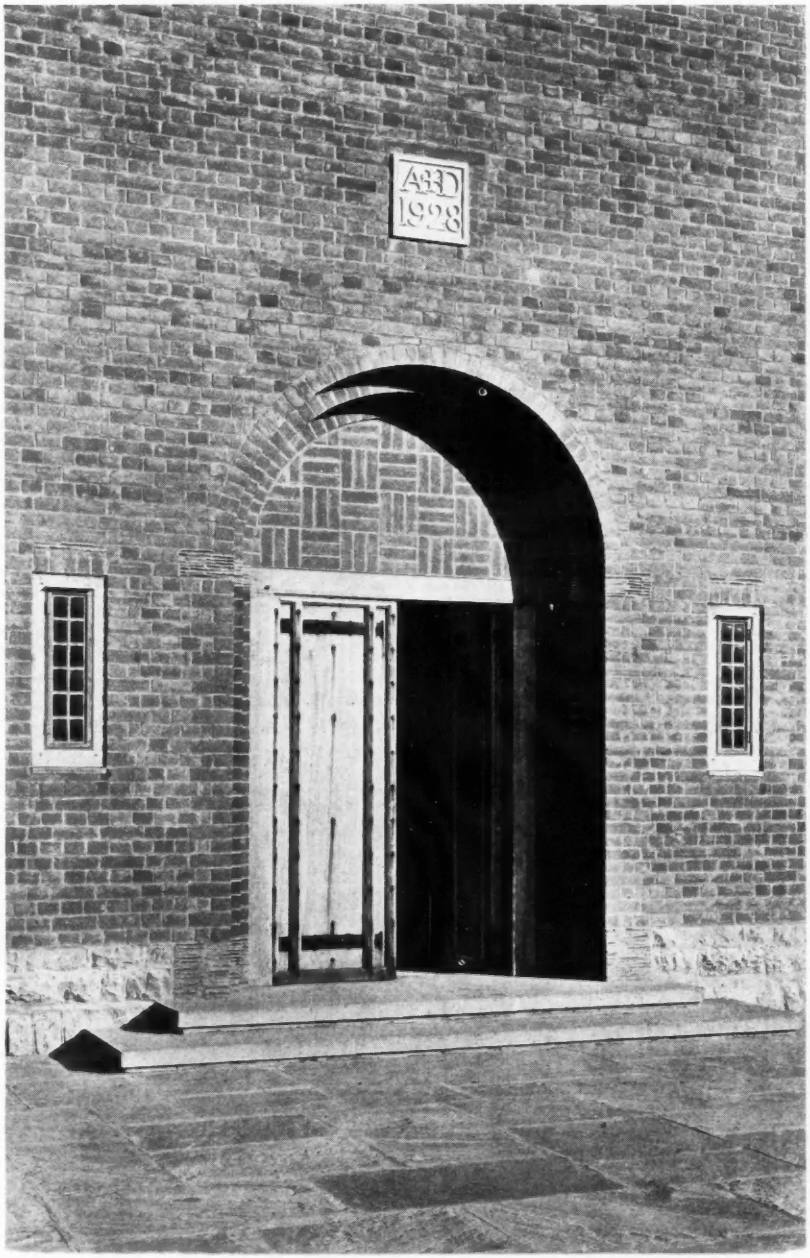
Always a hard worker, as a student he made complete measured drawings of a Suffolk church, was a prizeman at the R.A., won the Godwin Bursary, and made an exhaustive study of a large German hospital. After coming to London he entered into partnership with Stephen Salter, an architect with an old-fashioned practice. Mr. Adams very soon showed his ability by winning a competition for the Bedford Hospital, which showed his lucidity in planning and skill in the layout of the various buildings.

The Newcastle Royal Infirmary showed the same fine qualities on a larger scale. The Belgrave Hospital for Children, the Bristol Royal Infirmary, the Seamen's Hospital at Constantinople, the King Edward VII Sanatorium at Midhurst, were among the most important of his works before the war. In the case of the last, he made a tour of German sanatoria before doing the drawings.

After the war he continued his hospital practice. Among the most successful of the smaller hospitals was the Deal and Walmer War Memorial Hospital, which shows how an architectural arrangement of the wards can be combined with first-rate practical efficiency and economy, a point he always studied. At Southend he invented a type of ward which is likely to mark a step forward in planning.

In addition to hospital work, he also carried out the new buildings of the Law Society, the Institution of Electrical Engineers, the British Medical Association and many other buildings, but it is principally as a designer of hospitals that he will be remembered. His paper on English Hospital Planning, read before the Institute on May 27 last year, is likely to remain the standard work on the subject for a long time to come.

As a personality it is difficult to describe the secret of the hold he had over his staff and all connected with his work. His own enthusiasm and love of hard work was infectious, but quite apart from this, he was the most human of men and had a gift for inspiring affection in all and sundry. L. P.



The plain simplicity of the design of the arched western doorway allows the textures of the various materials to tell to the utmost. The creamy sharpness of the worked stone of the date tablet ; the velvet of the bricks, cut by the keen edges of the tile-courses at the springing of the arch, over the windows, and at the base ; the ruggedness of the coursed stone plinth—all form the ideal setting for the damask of the oak doors.

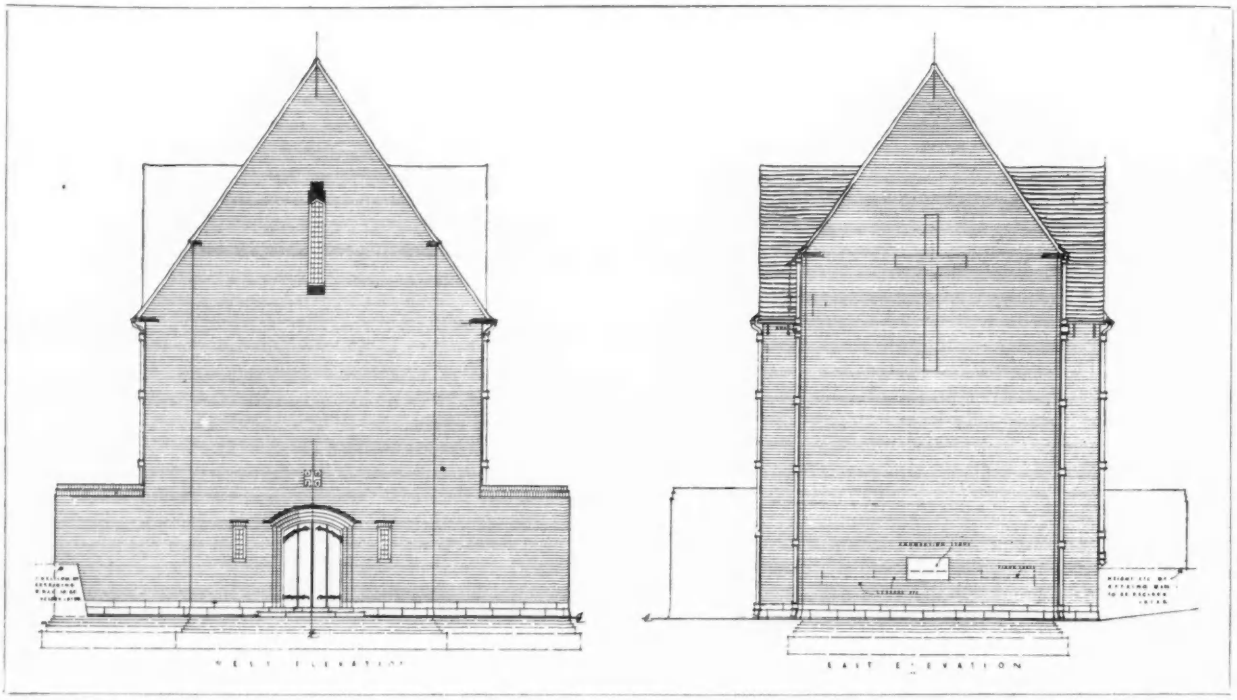
NEW CHAPEL AT SUTTON VALENCE SCHOOL, KENT

DESIGNED BY ADAMS, HOLDEN AND PEARSON

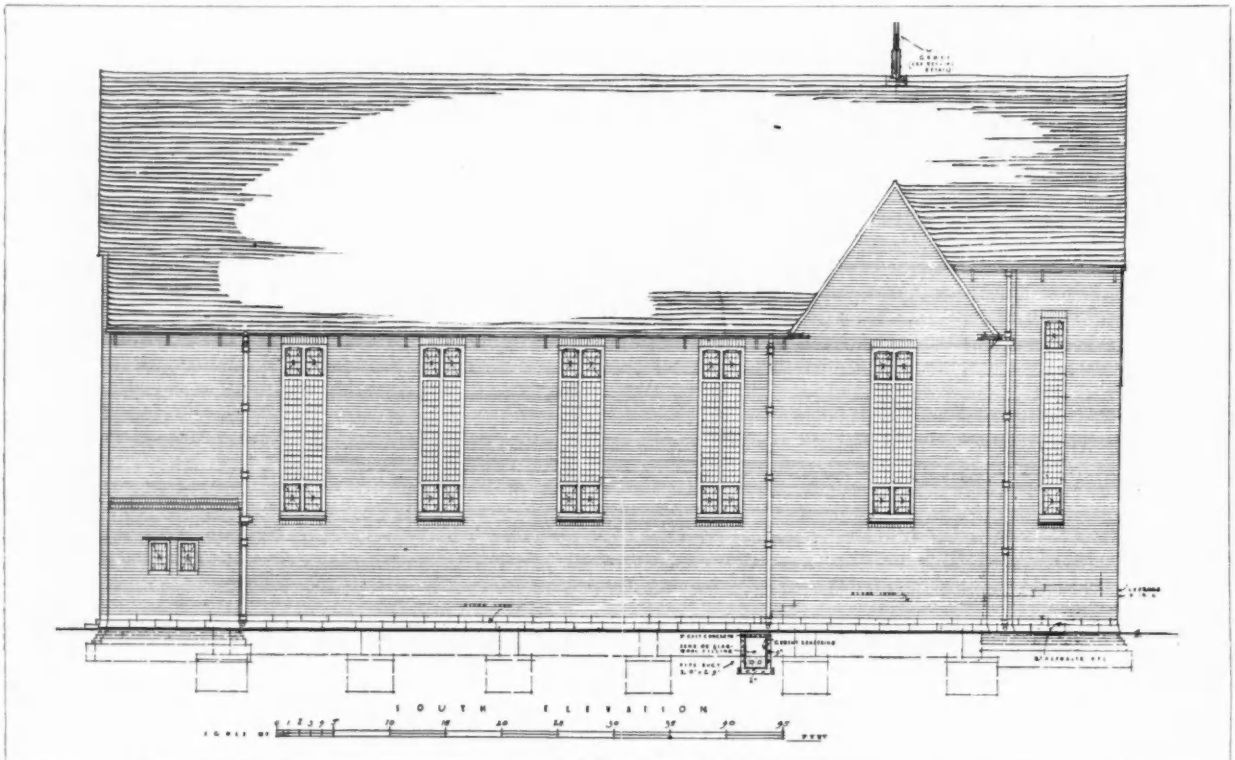
THE main buildings of the school, comprising school hall, class-rooms, two boarding-houses and masters' houses, were erected in 1910 on a beautiful site on the south edge of the plateau, forming almost a cliff above the village of Sutton Valence, and commanding a fine view over the Weald of Kent.

The approach to the school was originally along the south front of the school group, but it was found subsequently that the back entrance was more conveniently placed for general use. When, therefore, it was proposed to add a chapel, tuck shop and day boys' changing room, the first of which is the subject of the accompanying

(*Concluded on page* 606)



The architects' drawings of the west and east elevations. The only doorway occurs on the west, and on this front there are also two short transverse wings containing the vestry accommodation and stairs to gallery. The cross on the eastern end is formed in brickwork; below, near the base, is the foundation stone.



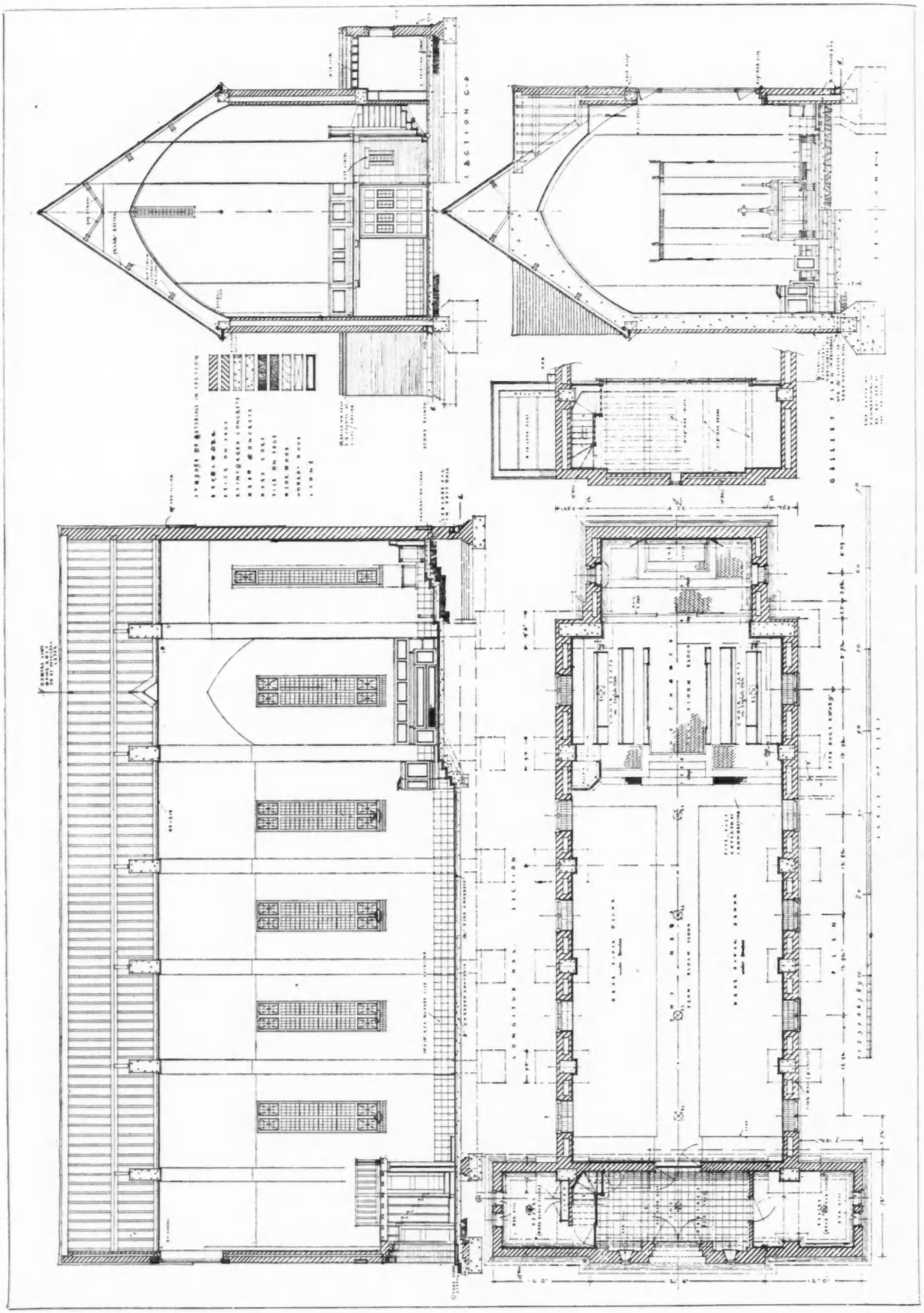
New Chapel, Sutton Valence School, Kent. [*By Adams, Holden and Pearson.*

The drawing of the south elevation shows the punctuation obtained by the deep vertical fenestration. The larger window openings have brick-on-edge heads and cills; the frames themselves are in oak, fitted with slab glass and metal casements. The external cross, severely plain, is in wrought iron.



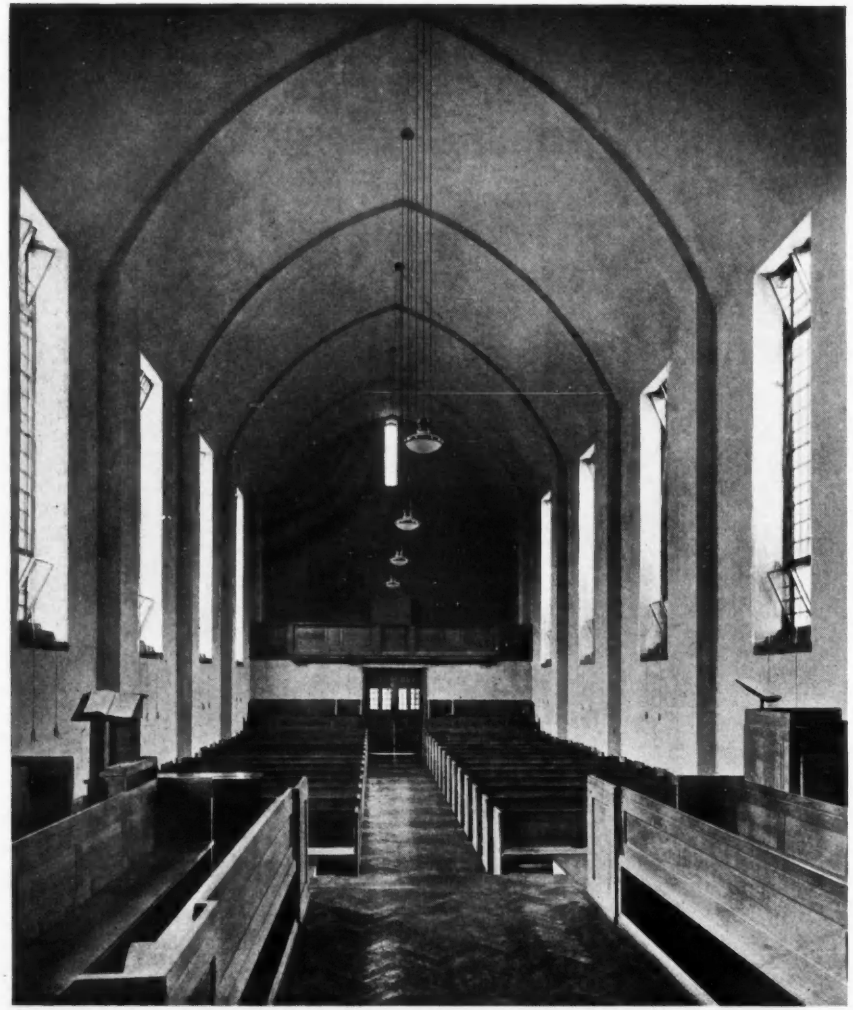
New Chapel, Sutton Valence School, Kent.] [*By Adams, Holden and Pearson.*

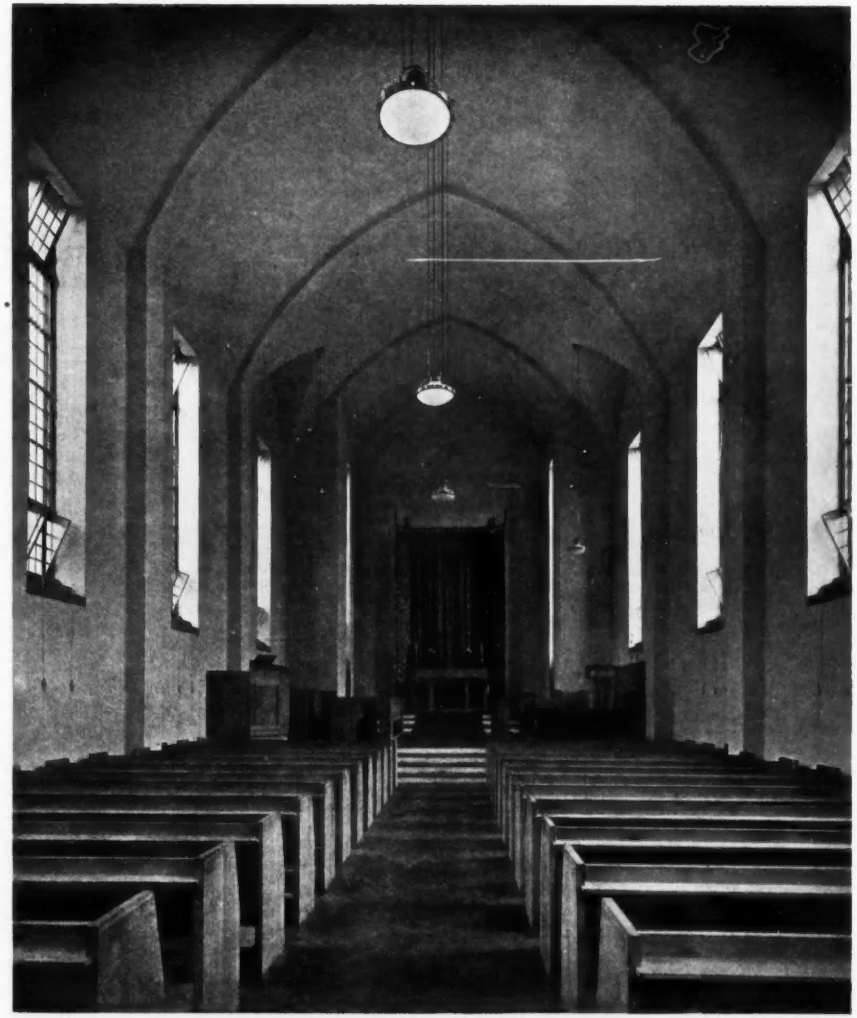
A general exterior view of the west end and north side, giving a hint, on the right, of how the new addition groups with the older school buildings ; their relative positions are indicated on the block plan, reproduced on page 606. Practically the entire building is carried out in red bricks and tiles, and is set upon a plinth built of the stone that had to be extensively excavated to afford a level site.



The architects' drawings of the ground floor and gallery plans, longitudinal section, looking north, and cross sections, looking in either direction. The constructional materials are clearly indicated by the key, from which it will be seen that the main supporting members are of reinforced concrete.

The architects' drawings of the ground floor and gallery plans, longitudinal section, looking north, and cross sections, looking in either direction. The constructional materials are clearly indicated by the key, from which it will be seen that the main supporting members are of reinforced concrete.





New Chapel, Sutton Valence School, Kent.] [*By Adams, Holden and Pearson.*

Two views of the interior, looking towards the west and east, respectively. All the furniture is in English oak, including the panelling of the small western gallery. The flooring is of deal blocks under the benches, and teak in the central aisle, chancel and sanctuary. A closer photograph of the altar is reproduced on the following page.

illustrations, advantage was taken of this opportunity to improve the entrance and to group the new buildings around a large forecourt. In forming the forecourt a large amount of rock was excavated, which was utilized in building retaining walls and steps, and in forming the plinth course to the chapel.

As will be clear from the block plan reproduced on this page, the tuck shop was designed to balance an existing lavatory block, the two buildings framing a striking vista of the Weald beyond, to the southward.

The chapel, which will accommodate upwards of 250 boys, is designed in harmony with the school buildings and, like the schools, is severely plain, in red brick, relieved by the use of English oak for the window and door frames, and slab glass for the windows.

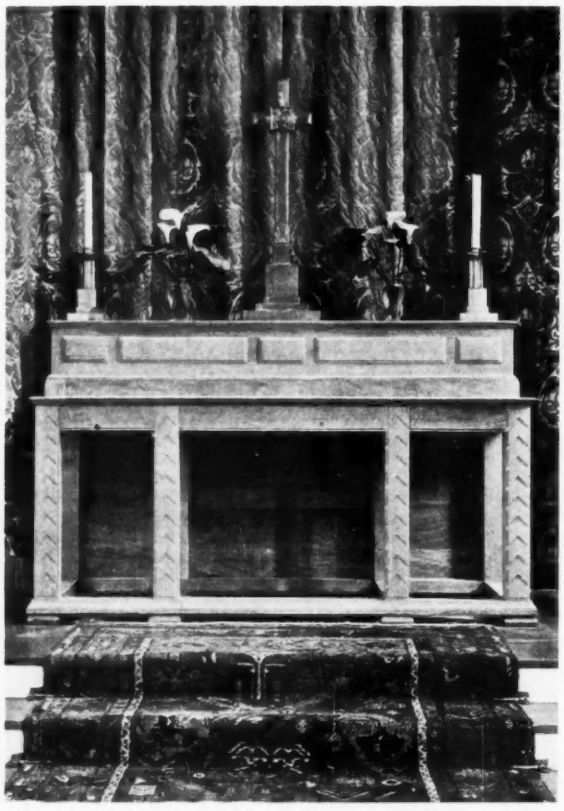
Internally, the fittings are of English oak, the floor of the central aisle and chancel being of teak blocks.

Owing to the great height, and the very exposed position of the chapel, it was necessary to take special precautions to ensure stability. It was therefore decided to construct the main frame of the building in reinforced concrete, the stancheons and arched trusses being carried on broad, splayed feet, tied together at the ground and plate levels by reinforced concrete beams. The beams at the ground level were used to carry the walls of the brick superstructure.

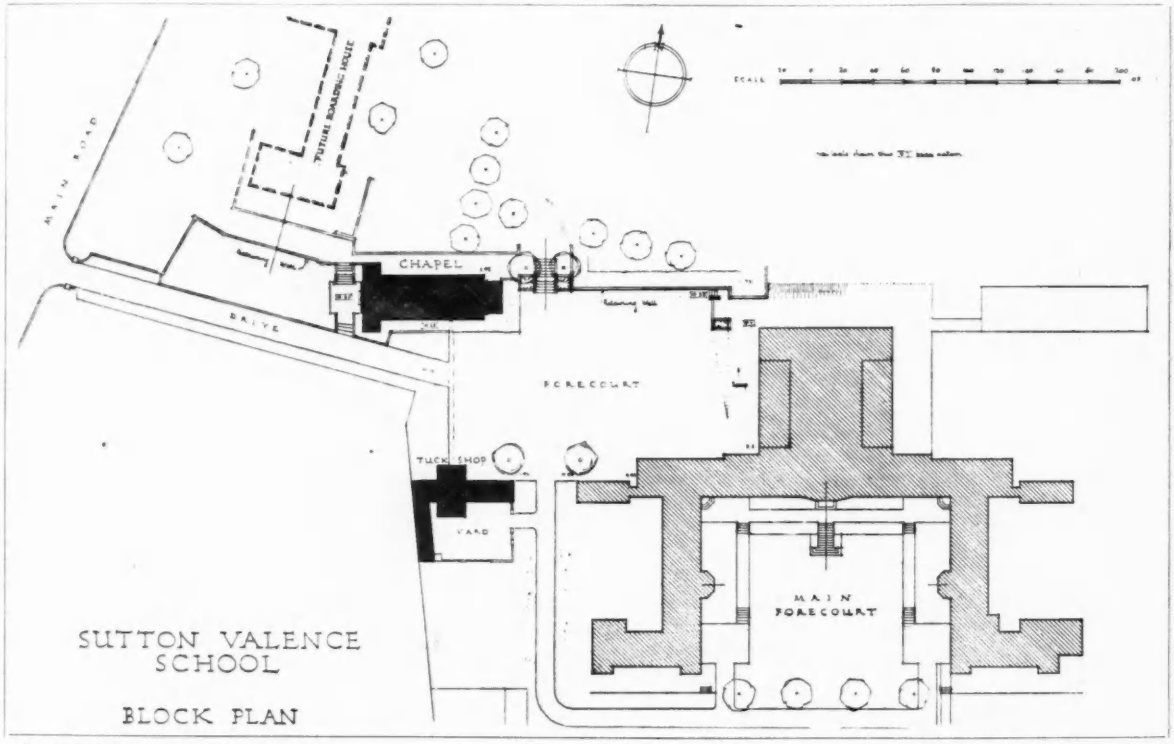
Internally, the walls are plastered, finished with the wood float, and distempered a warm cream colour. The oak fittings are left the natural colour of the wood.

Most of the internal fittings, benches, etc., were carried out by the general contractors, but the altar was the work of Mr. Richards, manual instructor, and the boys of the school.

For the wood carving and the stone carving, Mr. Joseph Armitage, and Mr. H. J. Cribb, respectively, were responsible. The building is electrically lit and centrally heated.



The altar table, in English oak, was made by boys of the school under the supervision of their manual instructor.



New Chapel, Sutton Valence School, Kent.] [*By Adams, Holden and Pearson.*

This site plan illustrates the change that has been made in the approach to the school buildings. Originally this was from the south, to the main forecourt, but that here indicated, by means of a drive, leading in on the west, from the main road, was always found more convenient, and the new buildings have been sited accordingly. The buildings stand on the south edge of a plateau with extensive views over the Weald of Kent.





The architects' perspective sketch showing the effect of the proposed treatment, visualized from Park Lane. The old Dorchester House is seen in the centre, with a new winged block behind. Park Street, on the left, was to be continued into Park Lane and, facing the angle at which they met, a new members' dining-room, with bowed front and members' terrace above, was to be erected.

A DORCHESTER HOUSE CONVERSION SCHEME

To Accommodate a Club with Large Sporting Membership

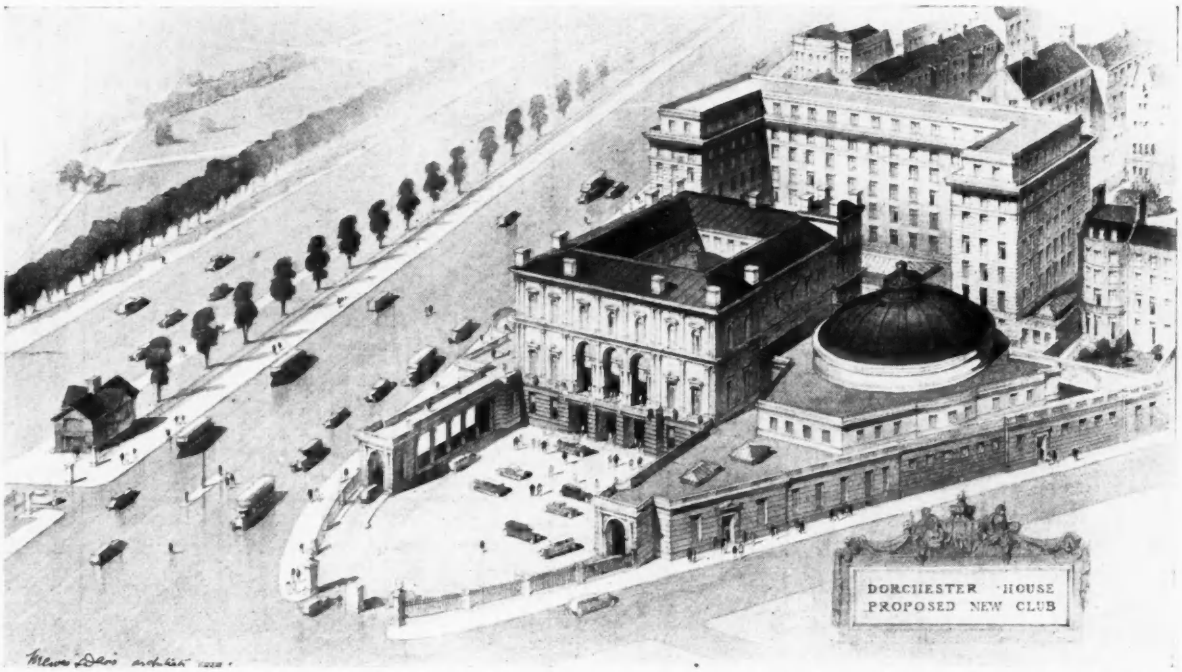
DESIGNED BY MEWÈS AND DAVIS

AT the time when the fate of Dorchester House hung in the balance this very interesting scheme was evolved for its transformation into luxurious club quarters for a large sporting membership.

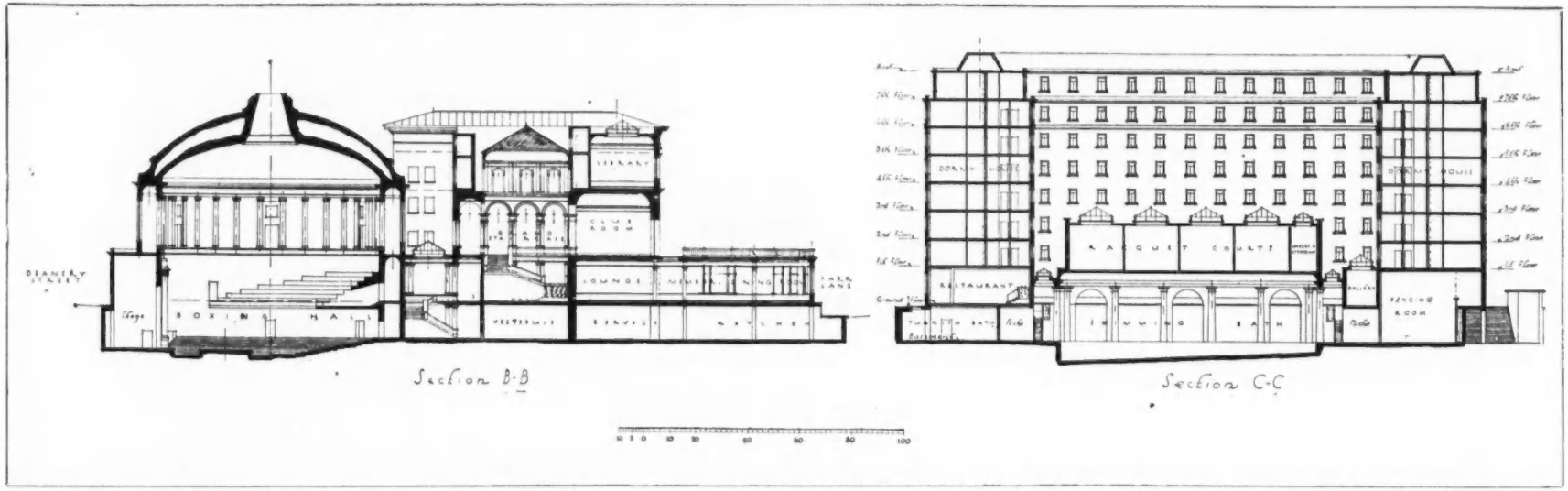
It was proposed to retain Dorchester House, adding wings to the centre block and erecting at the rear a large building to contain bedrooms, and with shops underneath on the South Street front; also to continue Park Street, which now terminates in a dead end, into Park Lane.

A garage to contain seventy-five cars was to be introduced under the forecourt and, above the old stables, a large oval hall.

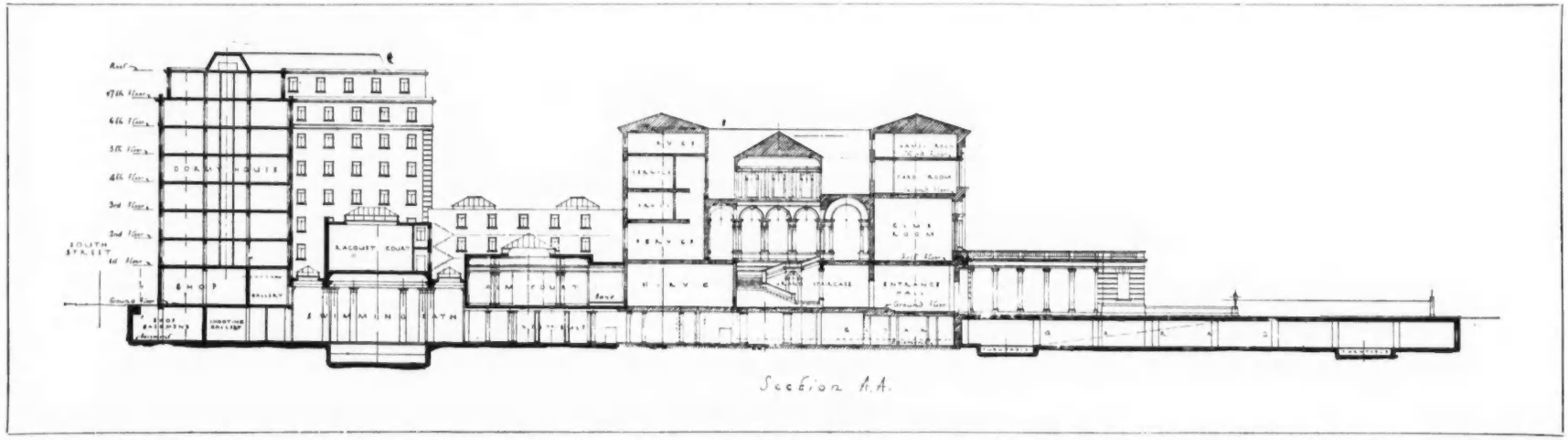
On the Hyde Park side a new kitchen and service quarters were designed, with dining-rooms and terraces above.



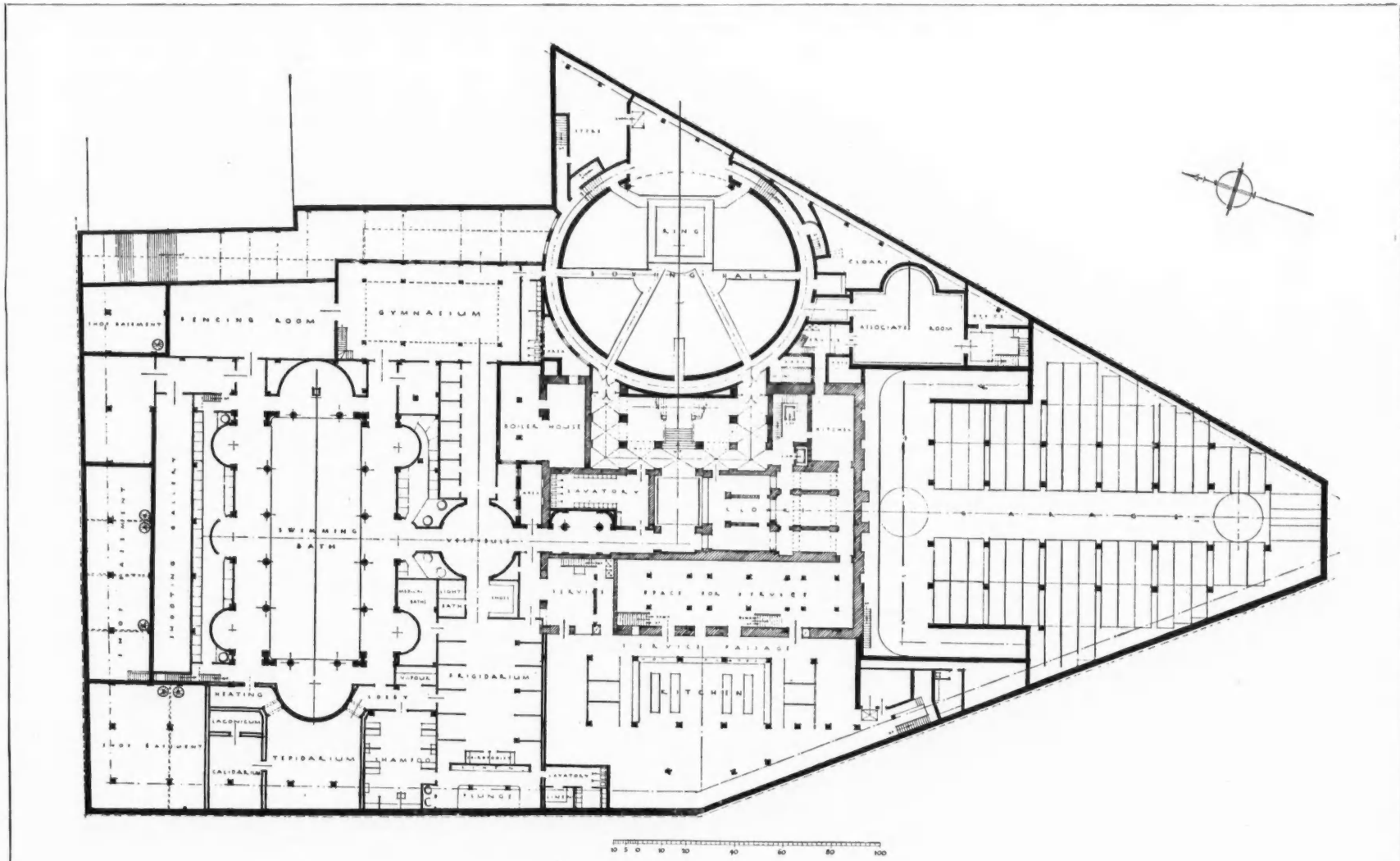
A general view of the proposals as seen from aloft. Park Lane and the Park lie on the left, and Deanery Street cuts across the foreground. The oval cupola is above the suggested boxing hall, and a garage was to be formed underground, beneath the forecourt, with entrance and exit slopes to left and right, respectively. Bedrooms were to be provided in the new building at the back.



Of these two cross-sections, that marked B-B is taken on the centre-line (short axis) of the boxing hall, looking in a southerly direction. The central portion shows Dorchester House proper, with its grand staircase, retained, but partly reconstructed, as necessary. Section C-C is on a line parallel to that of B-B, through the proposed bedroom block, but looking in a northerly direction, and shows swimming and Turkish baths and a fencing-room below ground level, and racquets courts on the first floor.

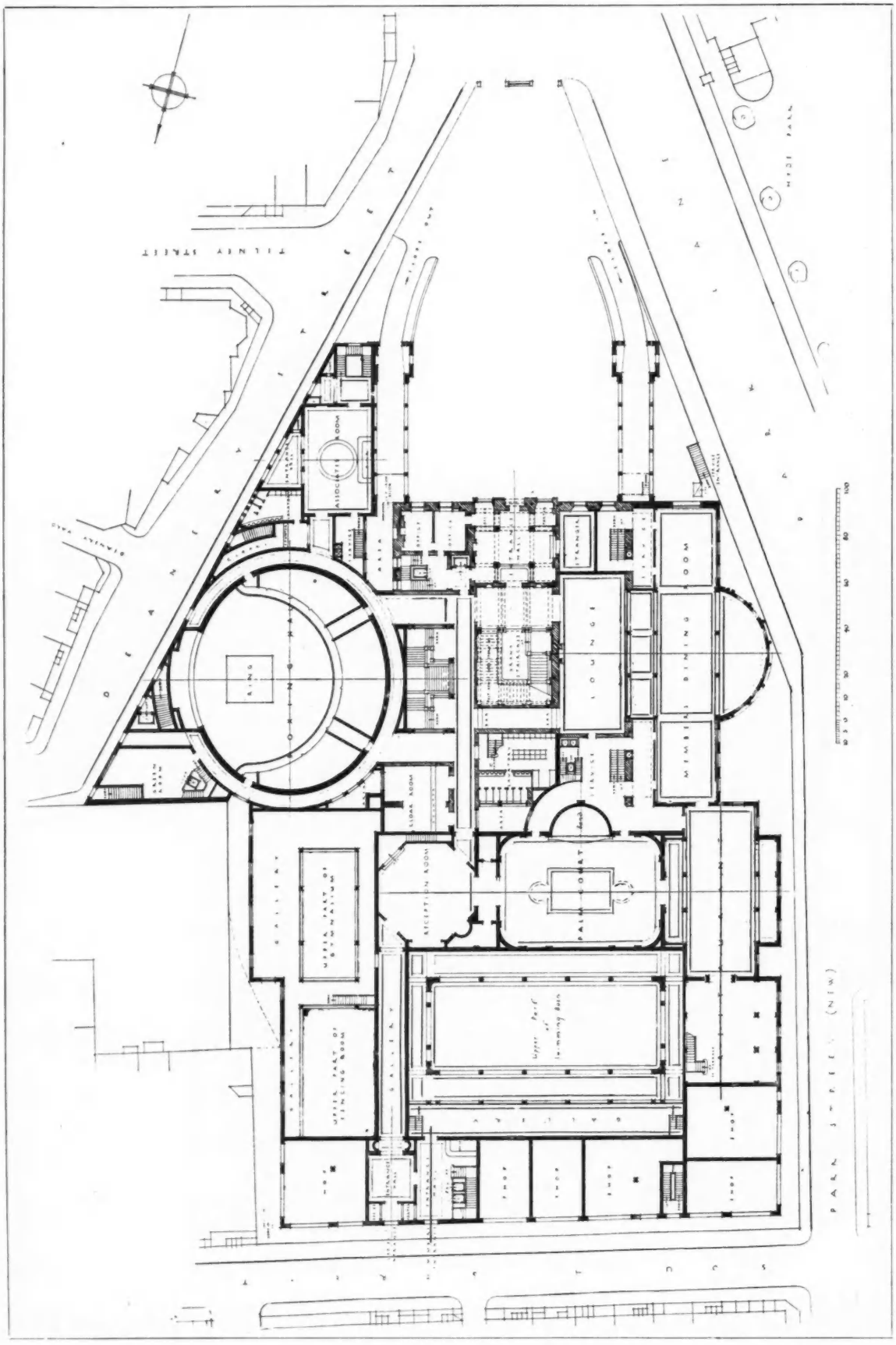


The longitudinal section on the north (left) and south centre-line of the scheme. Again, Dorchester House occupies the central position. A certain number of shops were contemplated for the ground floor and basement of the South Street front, the remainder of this new building to be given over to the Dormy House quarters. The positions of racquets courts and swimming bath are clearly shown. A top-lit palm court, with band alcove, occupies an intermediate position between new and old buildings. Ramps leading to the southerly underground garage, with turntables, are indicated.

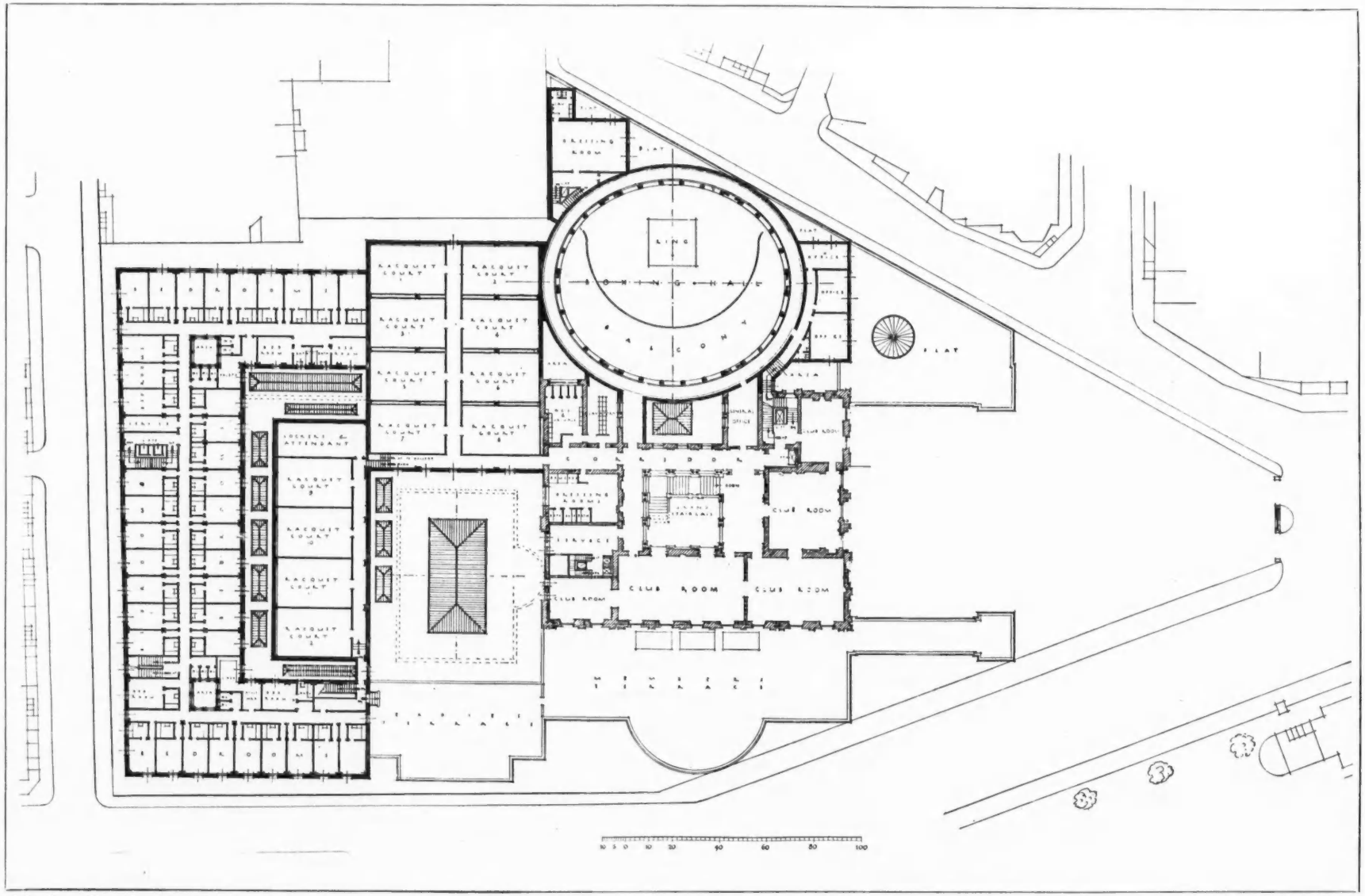


A Dorchester House Conversion Scheme.] [*By Mewès and Davis.*

This plan of the basement, in common with the other drawings, indicates the Dorchester House structure hatched, while the walls, etc., of the contemplated additions are in black. Alongside the spacious swimming bath, in the new northern block, is shown a shooting gallery, over 110 ft. long and, flanking it, suites of rooms for Turkish and medical baths. On the easterly side is a salient feature—the boxing hall; placed in opposition, on the west, are the ample kitchens and service quarters.



The ground-floor plan shows very clearly the road improvement that was part and parcel of the scheme: the extension of the Park Street cul-de-sac into Park Lane. The attractive proportions of the palm court, with its band recess, semi-circular on plan, can be appreciated. At this level it can be seen that tiers of seats and a stage are visualized as part of the equipment of the oval boxing hall, which extends also through the next floor above. To this hall and the associates' department there would have been separate entrances from Deanery Street.



A Dorchester House Conversion Scheme.] [*By Mewès and Davis.*

As this plan at first-floor level shows, some of the new work was intended to be only one story high. Upon the flat roofs of the members' dining-room and the restaurant, for example, are promenade terraces. No fewer than twelve racquets courts figure in the area of the new northerly wing and the annexe adjoining. Every bedroom shown on this floor has its own bathroom. The large lantern light is over the palm court, and the series of small ones illuminate the swimming bath. At this level, a balcony occurs in the boxing hall.

IBSLEY ELMS, HAMPSHIRE

[FROM A CORRESPONDENT]

"IT is tragic to know that those beautiful trees which formed one of the most lovely features of the whole road between Bournemouth and Salisbury have been cut down."

In these words reference has been made to the total destruction of the magnificent elm avenue between Ellingham and Ibsley. It was situated on the left bank of the River Avon, between the second and third milestones on the road from Ringwood to Fordingbridge, commencing from the crossing of the road leading from Moyles Court (associated with the Lady Alice Lisle) to Somerley Park (Lord Normanton's seat).

At the other end of the avenue was Ibsley Church, and the old bridge over the Avon to Harbridge, which is in course of reconstruction. It formed, in summer, a continual arch of living green for a distance of about three-quarters of a mile along a gradual curve in the road.

There were over 300 trees, of which nearly all were elms. Unfortunately, last winter's gales dealt severely with elm trees in particular (over 95 per cent. of the trees that came down were elms), and the destruction of these glories of the landscape, already premeditated for road improvement [*sic*], was precipitated.

The Council for the Preservation of Rural England had made strenuous efforts to prevent the felling. They offered to provide an independent expert to pronounce on the soundness of the trees; but unfortunately when it seemed likely that their efforts might prove to some extent successful the two extraordinary gales came which wrecked so many trees all over the country, and the owner would not take the risk of allowing the trees to stand. Every one was felled; and it is understood that only about six of them turned out to be rotten, although a number of others were insecure.

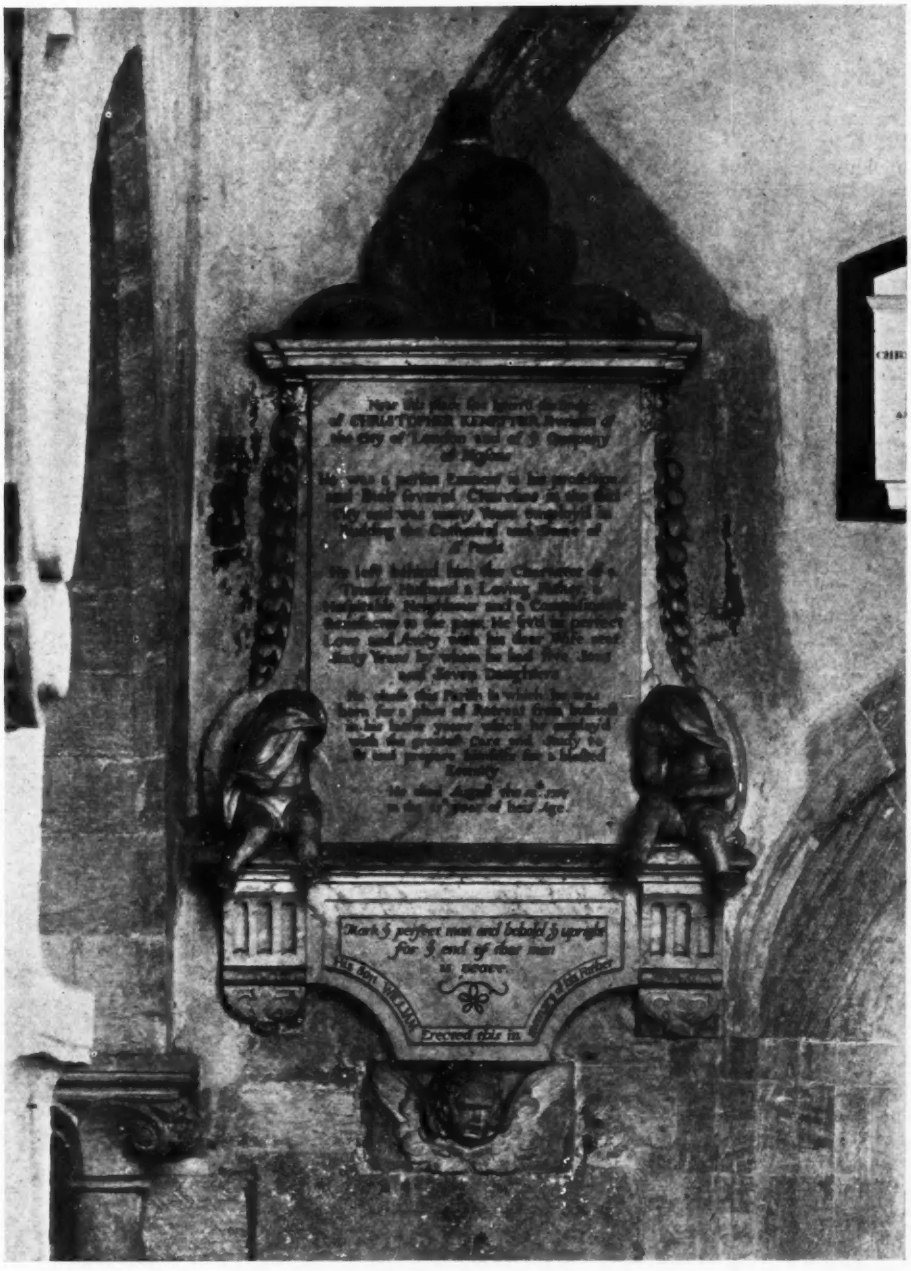
To emphasize the tragedy of this destruction, it should be repeated that the road takes the form of a curve, the length of which was occupied by the avenue; and the obvious treatment would have been to cut the new road in a straight direction, as a chord of the arc. The avenue could have been left (after removal of any trees pronounced unsound by an expert) as a resort for pedestrians and beauty lovers. An insurance policy could have been taken out to cover the owner against loss.

Let it be added, however, in mitigation, that the local authority have agreed to replant when the road widening is finished. Nevertheless, the felling was a disgrace to all concerned; and all the more to be regretted because instructions were issued on November 1, 1929, by the Minister of Transport to its Divisional Road Engineers that special care was to be taken, in road widening and similar works, to preserve existing trees as far as possible. It is to be hoped that it may be possible to include in the Rural Amenities Bill further provisions for the protection of timber alongside roads, and in particular that some of the oak trees may be saved in the avenue which leads from Christchurch to Bournemouth, at the approach to Iford Bridge, now being widened.





Two photographs of the elm avenue on the left bank of the River Avon, between Ellingham and Ibsley, Hampshire, before and after the demolition of the trees to make way for road widening. There were nearly three hundred trees, most of them elms.



ENGLISH PRECEDENT No. 111

MEMORIAL TABLET, BURFORD CHURCH, OXFORDSHIRE

This photograph of Christopher Kempster's memorial tablet reminds us that much of the stone used in the building of St. Paul's Cathedral came from quarries close to Burford. These are still known as Christopher's or Kitt's quarries. Near them is a house bearing the inscription, "Christopher Kempster built this in 1698." —[THOMAS FALCONER.]

CHARING CROSS BRIDGE BILL: COMMITTEE'S DECISION

BY OUR SPECIAL REPRESENTATIVE

THE Chairman (Sir Henry Cautley) having announced that the Committee were not satisfied with the proposed position of the Southern Railway station on the south side of the Thames, nor with the proposal that there should be a series of tunnels over streets in that area, later in the sittings, Mr. Frederick Palmer, consulting engineer, who considered the scheme jointly with Sir George Humphreys for the London County Council, was recalled and laid before the Committee plans for a scheme by which the new station would be placed on the south side of the present Waterloo station.

After the plans had been discussed in conversation between the Committee, counsel, and the witness, around the table, Sir Lynden Macassey, K.C. (for the L.C.C.) said that the general principle governing the application of the Road Fund was such that under the scheme for a station on the south side of Waterloo, the L.C.C. would receive no grant for the embankment improvements on the Surrey side. They could not be expected to carry out those improvements without assistance.

The Chairman: You cannot make this bridge, which is 95 feet wide and a great artery to the south, without having an embankment. You cannot say that that is not part of the scheme.

Sir Lynden Macassey: We should get no contribution for the extent to which it exceeds what is incidental to a road scheme.

The Chairman: We do not like the present scheme, with a road twisting about and all these viaducts.

Sir Lynden Macassey: If you could get us the money for an alternative scheme we would consider it.

The Chairman: From the very first day we have understood the potency of the three pounds for one.

Sir Lynden Macassey: It is the contribution of the Ministry of Transport that has made the scheme in the Bill possible. Take that away, and it becomes impossible.

Sir Herbert Walker, subsequently recalled, said that Mr. Palmer's plan had many more disadvantages than even the Waterloo Junction site, and certainly none of the advantages of the Lion Brewery site. The means of access would be very inferior compared with the Lion Brewery site, and, as in the case of the Waterloo Junction site, entrances to the station would have to be from the road level, which meant that luggage would have to go up to the platforms by lift. The distance from the centre of the station to the underground railway would be 450 yards, as compared with 192 yards at the Lion Brewery site. There would be two distinct stations because the road access to Waterloo must remain where it was, in between the side of the two stations. The cost of working the station would in all probability be greater than at the Lion Brewery site. The site did not lend itself to the building of a hotel.

The Chairman: Have you considered the possibility of making Waterloo a through station and running trains to Cannon Street or London Bridge? Surely that would be a great advantage?

Sir Herbert Walker: Not so much as it seems at first sight. There might be an advantage in running some of the electric services through, but not the long-distance steam trains.

Asked by the Chairman whether he had ever considered putting another station on top of Waterloo, Sir Herbert Walker said that the Air Ministry had inquired whether it would be possible to put an aerodrome there, and it was then found that the cost would be £5,000,000 for an aerodrome alone. He would not like to say what a station would cost. The whole of the foundations would have to be underpinned, as they had only been built to carry platforms and the roofs. They could rule the proposal out as quite impracticable on account of the cost.

The Chairman: Mr. Palmer's plan does get rid of long blank walls, and a bend in the street, and it does make the traffic go direct to the new bridge and to Waterloo Bridge without all these tunnels.

Sir Herbert Walker: I think you would have very great difficulty in getting the traffic to Waterloo Road. The only advantage of the scheme is that at some time or other we might connect up the two systems. We should certainly oppose most strongly this scheme or the Waterloo Junction site.

The Chairman: In other words, you oppose being put anywhere except on the Lion Brewery site? — No, we prefer to be left alone where we are now.

Sir Henry Maybury was also recalled and said that Mr. Palmer's plan would not be so advantageous from a traffic point of view as the scheme in the Bill.

The Chairman: But it would permit of a very fine development of York Road and Stamford Street as a through road?—Yes, very much better.

And it would do away with half a mile, or perhaps more, of existing viaduct?—Yes.

Committee's Decision

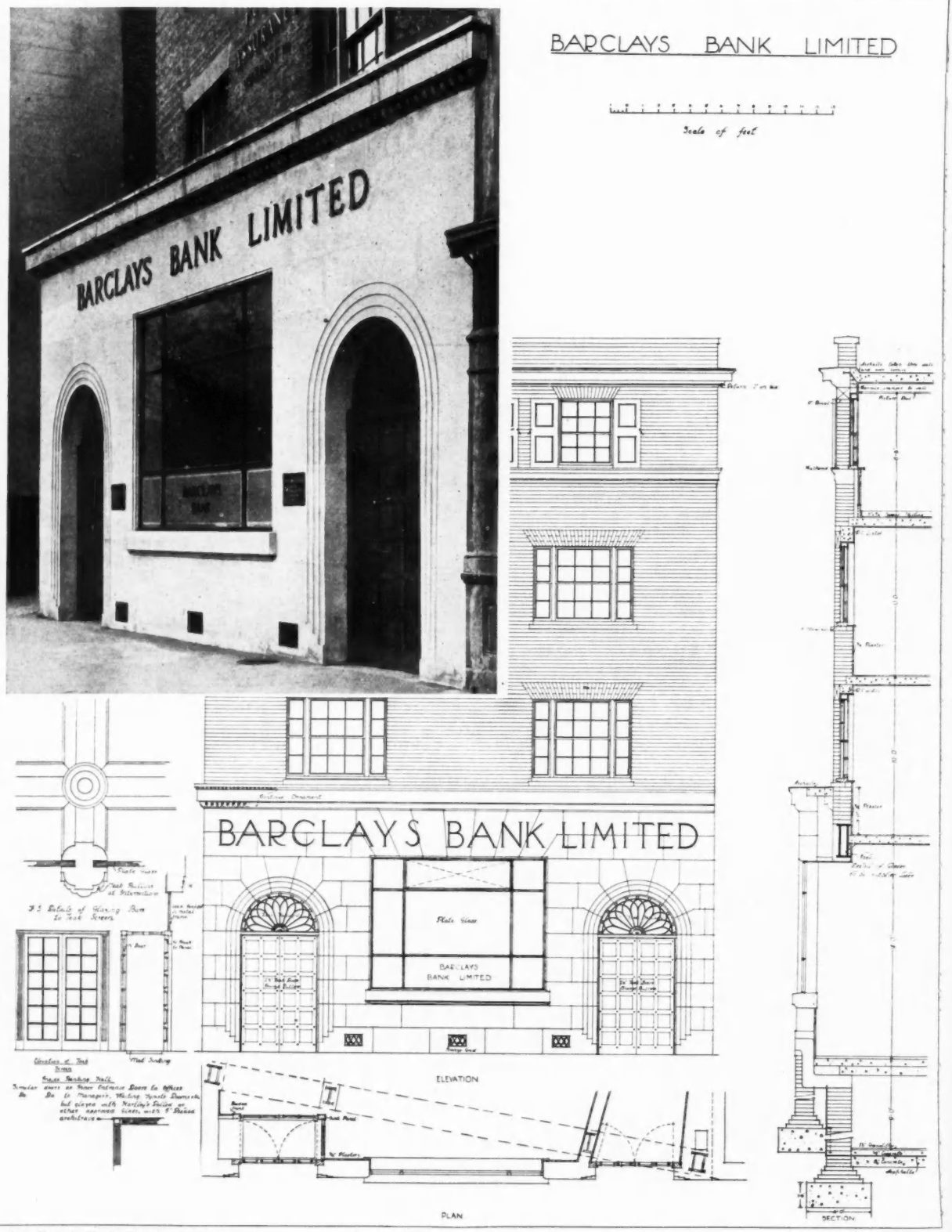
On Thursday, when the Committee assembled, the Chairman announced that so far as traffic was concerned, he believed that if the original L.C.C. plan of widening Waterloo Bridge had been adopted, it would have dealt with traffic problems for many years to come. At any rate, having seen the model and heard the evidence, the Committee were satisfied that the three bridges—Westminster Bridge, the new Charing Cross Bridge and Waterloo Bridge—as portrayed before them, would make an immense improvement to London and make the river worthy of the city.

There was one comment as far as the northern part of the scheme was concerned. The scheme of development of the new road bridge at Charing Cross would pour a large amount of through traffic into the Strand. The Committee accepted the evidence of Sir Henry Maybury that it would improve traffic arrangements and present no insuperable difficulty, provided that before that traffic poured down from the bridge St. Martin's Lane was widened.

Coming to the southern side, the Committee were of opinion that a 95-ft. bridge would create a great opening for the development of Lambeth. They were not prepared to accept the evidence of Mr. Hunt (valuer to the L.C.C.) that such development in the future was not likely. Business was quite likely, the Committee believed, in the future with these facilities to extend into Lambeth.

The great blot on the scheme, the Committee were agreed—and they were not prepared to accept it—was the putting of the railway station at the bridge head, and causing one road to go over the other in the way shown in the model. The Southern Railway had, on the ground of national necessity, agreed to move, provided they went to one particular site. The Committee thought that only the railway point of view in the selection of the site had been considered. They could not believe that the Southern Railway could not agree to having the station put in a different position if such a site could be found.

The best course would be to adjourn the Committee for, say, a month—to May 6, the first Tuesday after Parliament met—the L.C.C. to consider with the Southern Railway whether they could not meet the views expressed by the Committee and find some different site for the railway. "We do not like to go down to posterity as the people who held up the whole development of this place by putting these thirty-three acres of railway station in this position."



Barclays Branch Bank, Kennington, S.E.] *[By Adshead and Ramsey.*

A photograph and the architects' working drawing of the entrance front to Kennington Road. When the needed rectification of the corner of Kennington Park Road and Kennington Road is made, the Portland stone front will be set back in line with the brickwork over, as shown in dotted lines on the plans reproduced on this and page 618.

BRANCH BANK AT KENNINGTON, S.E.

DESIGNED BY ADSHEAD AND RAMSEY

THIS bank is a branch of Messrs. Barclays and is built on the Duchy of Cornwall Estate, Kennington, at the corner of Kennington Park Road and Kennington Road, immediately opposite the Horns Tavern. The upper part is of Redhill bricks, with patent stone dressings; the lower is faced with Portland stone, and the entrance doors are of teak, studded with bronze nail-heads and with wrought-iron grilles over. There is a banking hall on the ground floor and sets of offices over.

As at present erected there is a rather awkward junction between the Portland stone front and the brick upper portion of the building. This will be overcome when the needed rectification of the corner of Kennington Park Road and Kennington Road is carried out, and the stone front set back in line with the upper portion.

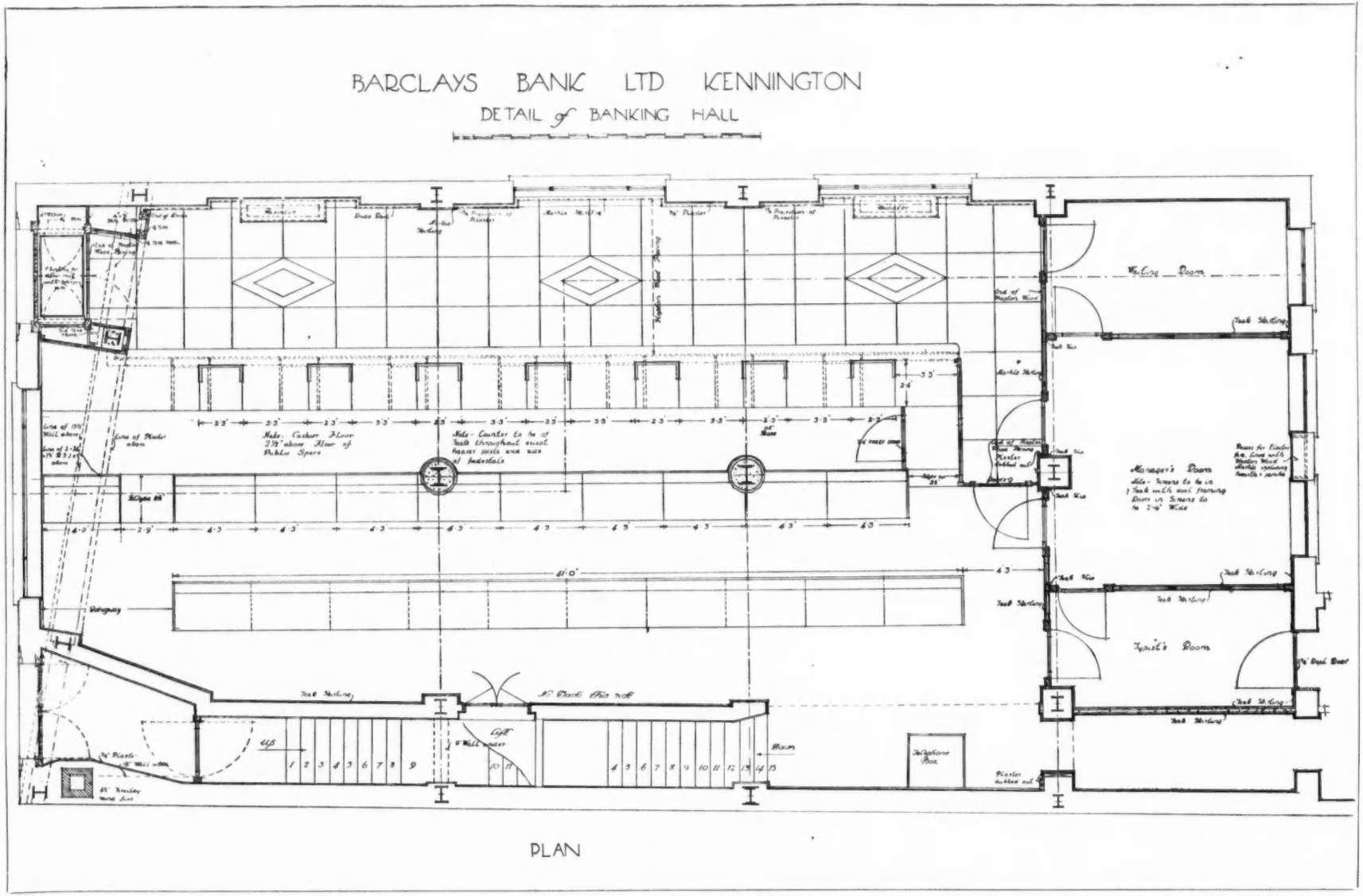
The design for the front elevation, as well as for the interior, is on somewhat severe lines, but shows the influence of tradition.

In the interior are plain plastered walls and ceiling, distempered to an ivory cream; and mouldings are very few and simple. Generally speaking, the effect is one of quiet and almost Quaker-like simplicity: at the same time, there is an air of dignity and security about the building which indicates its purpose as a bank. The floors are of reinforced concrete, and the construction generally fireproof.

In design the elevation follows on the lines of the late-eighteenth-century work which is peculiar to the neighbourhood. Most of the older buildings in Kennington which have any architectural significance date from this time, and the architects to the Duchy, Messrs. Adshead and Ramsey, who are also the architects of the bank, relied for their inspiration on these older buildings when they rebuilt the Prince of Wales's estate. The new bank makes an harmonious unit with the whole.



The public space, looking from the entrance, towards the waiting, manager's and typists' rooms. The walls and ceiling are of plaster, distempered ivory cream, and the fittings of wax-polished teak, with grilles of bronze. The floor is of Bianco-del-Mare marble.



Barclays Branch Bank, Kennington, S.E.] [*By Adshead and Ramsey.*

Plan of banking hall. The entrance on the left of the main front leads to the public space; that on the right, to the suites of offices on the upper floors. The manager's room is planned between the waiting room and the typists' room. It has direct access to these apartments as well as to the public space and the general office. The cashier's department, the floor of which is 2½ inches above that of the public space, is entered from the general office by a dwarf door.

LITERATURE

MR. PENTY'S NEW BOOK

MR. ARTHUR J. PENTY is known, outside the pages of this JOURNAL and the world of architecture, as the author of numerous books on the Medieval Guild System and Social and Industrial Growth, and as the possessor of a powerful intellect, wide scholarship and high accomplishment in the craft of letters; and in his new book he brings his versatile resources to bear on the technical aspects of everyday house-design as they present themselves to the practising architect.

Much of the work has appeared serially in these pages, but it was, clearly, planned as a book, and it is only as a book that the central idea which gives identity to the work and marks its achievement can be appreciated. The idea of *The Elements of Domestic Design* is new, and the ground it covers is new; but the need for such a book is very far from new, and it is remarkable that no attempt has before been made to satisfy that need. The book is concerned with those details of building construction which involve design, and in this it avoids the irrelevancies and superfluities of the building construction textbook. It represents the vernacular of building detail as spoken by architect-designers, and is planned to answer their questions, relieve their doubts and guide their judgment while at work. So far as such a thing may be possible, the book makes good to the architect what he lacks in experience. Take, for instance, the feature, eaves, the design of which calls for subtle imaginative discernment. The designer has to determine the form, dimensions and embellishments of his eaves necessary to give that expressiveness to his elevations which is his aim. A textbook on building construction will merely chill the faculties he wishes to stimulate, by the arid poverty of the matter it deals in; but Mr. Penty provides a round score of scale sections of eave-forms, so rendered as to satisfy the requirements of a book-illustration, showing many varieties of "shoots" fixings, and so forth, all of which will be recognized as belonging to the right substance of expressive architectural design. He supplements these with concise descriptions, elucidating the practical and æsthetic merits and traditional associations of each example, so that the designer is informed in exactly the way he needs, and his imaginative reason is quickened and his confidence enforced.

The writer who expounds the *practice* of design has to face the particular difficulty that whatever examples of the application of his principles he adduces, he cannot expect to carry everyone with him. Tastes differ, and the challenge "Is this all we are arriving at?" cannot be avoided. Mr. Penty has, however, managed to get off lightly, partly because he gives a large number of examples, and partly because he chiefly concerns himself with the design of details rather than with their application. His sash and casement windows, for instance, are excellent; they are fundamentals, but they are, so to speak, units which all designers have common need of. On the other hand, when Mr. Penty's examples involve composition and æsthetic taste, it must unavoidably happen that some Jones or other, looking at the book, will find that he prefers Jones to Penty. A case in point is the set of plates illustrating a simple staircase. The baluster design, of which a number of examples are given, is unusual, and will not appeal to everyone, because they are unusual. What the author has to say on the subject, however, will be found to be true in the experience of all who have experimented in the design of balusters, and the force with which the principle is presented is likely to change disfavour into definite admiration.

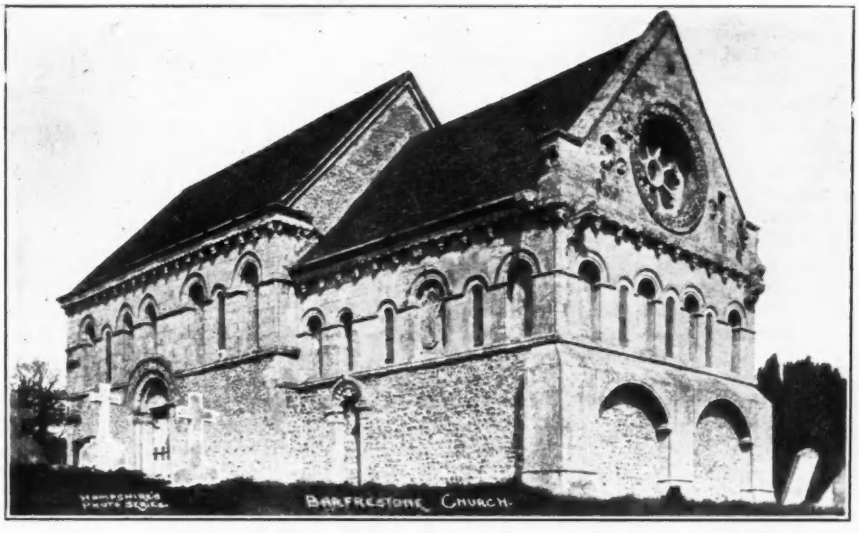
Mr. Penty's book is, therefore, an ideal reference book for the drawing table: so far as it goes, it is adequate, and I know of no other book of which that can be said; but it is more particularly a book to study or—for those who are well-informed—to read with delight. The subject-matter has been broken up into sections for convenience of reference. Where these are explanatory of the examples illustrated they are full of discerning comment and curious information; and where they have a more general application they are masterly little essays which display the author's erudition and wide experience through the medium of a crisp, lucid, direct style which any writer might envy and only a skilled writer adequately admire, for Mr. Penty does this most difficult thing with beguiling ease. In all this writing the author uses a well-balanced discretion. In a quiet way he inculcates a principle of address to the subject of design which in my opinion is admirable, and if I had pupils in my office or were otherwise guardian of the young in my vocation, I should press this book upon their attention.

H. B. CRESWELL

The Elements of Domestic Design. By Arthur J. Penty. The Architectural Press, Ltd. Price 15s. net.

EAST KENT REGIONAL PLANNING SCHEME

TO fully appreciate this report, the preliminary survey, published in 1925, should be on the table by its



A General View of Barfrestone Church.

[*From* East Kent Regional Town Planning Scheme —Final Report.



From East Kent Regional Town Planning Scheme : Final Report.]

Chemist's Shop, Wingham.

side. The two together are most instructive as showing how a thorough study of conditions is needed to justify and give validity to a scheme of this character.

The preliminary survey covered more than its title suggested, and included a general outline of a scheme, but since the date at which it was issued many of the developments, then in an embryonic stage, have taken a more definite form and thus not only has progress to be recorded, but the proposals for the future can be made with a greater measure of confidence. While the general lines of the scheme still stand, every aspect of the problem has received further consideration, and there are, consequently, many changes of detail. The road alignments have received very close attention with a view to efficiency and economy, no fewer than fifty-five roads of varying importance being laid down and their purpose explained, while railways and air transport are not overlooked. The influence of water and other supplies, together with drainage, has been considered in deciding the allocation of areas for various purposes.

The fine map that accompanies the report indicates the following allocations : (1) Areas at present built on ; (2) Areas defined as residential ; (3) Areas proposed as residential ; (4) Areas for factories around coal pits; (5) Areas for factories elsewhere ; (6) Public open spaces now existing ; (6a) Public open spaces proposed ; (7) Private open spaces ; (8) Agricultural land transferable to other purposes ; (9) Agricultural land permanent ; (10) Low-lying land ; (11) Government property.

Allocations Nos. 2 and 3 are mainly around existing towns, but the new mining town of Aylesham is in course of construction on a carefully chosen site about midway between Canterbury and Dover. It is planned for a population of 15,000, and four hundred houses have already been built while a further hundred are in course of construction.

At Chislet the scheme provides for 1,000 houses, and a smaller group has been built near the Tilmanstone Pit.

The land reserved under No. 4 extends for a radius of half a mile around each pithead, while the main reservation under No. 5 is an area about a mile square to the N.E. of Dover, where an existing rail track connects with the harbour.

It is suggested that the fine woodlands to be found in some parts of the area should be preserved as open spaces, with public access to defined paths and rides only so that their economic exploitation would not be interfered with.

The suggestion is also made that owners of private parks should be invited to declare these as permanent open spaces, and thus free themselves from taxation on prospective building values, which might eventually compel realization even when not desired.

Other proposed open spaces aim at securing the coast line where this is still accessible.

The division of the agricultural land into two classes is to separate that which might reasonably be used for building if the demand arose, from that where any other form of development would be undesirable.

It is proposed that local features should be dealt with by the respective town-planning authorities, but that if these did not wish to be burdened with the responsibility they could have their part done at a central office. A great economy of staff could be effected by the general adoption of this method.

H. V. LANCHESTER

East Kent Regional Town Planning Scheme : Final Report. By Patrick Abercrombie in collaboration with John Archibald. Publishers : Austens, Canterbury.

THE ROMANCE OF ARCHITECTURE

THIS little paper pamphlet is more than meets the eye. It is a shillingsworth of magic carpet, or some marvellous lamp of Aladdin, holding within its fifteen pages the means of carrying the willing reader over a thousand miles of space and across some thirty centuries in as many minutes. Great though the distance may seem between the Pyramids and St. Paul's Cathedral, the prehistoric hut and "England's mansions," the word of the genie transports thought and imagination back and forth with easy transition and with the exhilaration of smooth, effortless speed. This is how the ordinary non-technical reader of today likes to take his tabloid information.

Yet in reading this leaflet he will acquire not merely a sketchy knowledge of the great monuments of the past, and of their origins and consequences, but he will inevitably breathe deeply of the subtle aroma of romance—the romance which lurks in all architecture of all ages. It will not be the fault of Sir Banister Fletcher if those who inhale his skilfully distilled concentrated essence of magic and romance do not turn ere long to larger histories or to more careful personal observation of the buildings around them. That is the evident aim of this useful little leaflet in which are reproduced eight photographs and "The Tree of Architecture" from the author's *History of Architecture on the Comparative Method.*

V. M. C.

The Romance of Architecture. By Sir Banister Fletcher. London : B. T. Batsford, Ltd. 1s. net.

Publications Received

Art and Scholasticism. By J. Maritain. Publishers : Sheed and Ward. Price 7s. 6d. net.

Time, Taste and Furniture. By John Gloag. Second edition. Publishers : G. Richards. Price 8s. 6d. net.

Building Science Abstracts. Vol. III. (New Series), No. 1. January, 1930. Abstracts Nos. 1–241. Compiled by the Building Research Station and published in conjunction with the Institute of Builders. Price 9d. net. Copies are obtainable from Director of Publications, H.M. Stationery Office.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

The Housing Bill

THE House was sympathetic to the Government's Housing Bill, and gave it a second reading without a division; but there were several criticisms of certain of its provisions and of its omissions. The most detailed criticism came from Mr. Chamberlain, who was Minister of Health in the late Unionist Government.

He pointed out that the most important provision in the Bill was the alteration of the subsidy, and he approved the method of getting away from the percentage contribution. Experience of the Housing Acts of 1923 and 1924 showed that the plan of making definite contributions from the Exchequer conduced to efficiency and economy. So far as the increase of subsidy was calculated to reduce the liabilities of the local authorities, he approved of it. In so far as the new subsidy was to make differential rents, he foresaw considerable difficulties. He regretted also that there was no provision for the town-planning of built-up areas, which had been long called for and was understood to be associated with a Bill of that kind. There was also the exceptionally harsh and unjust provision dealing with compensation to owners whose property was to be demolished. No distinction was to be made, apparently, between any buildings in slum areas. In many cases owners had been compelled to spend money in putting houses in good condition; but, once an area had been declared a clearance area, those houses would have to be pulled down by the owner at his own expense. He did not think that that proposal, if he understood it rightly, could be allowed to stand in the Bill. In the case of local authorities purchasing an area, there again all houses in the area were to be purchased by the local authority at site value.

The Minister of Health, in Mr. Chamberlain's opinion, had missed a great opportunity with respect to the treatment of improvement areas. Reconditioning might be a very valuable adjunct to other provisions dealing with housing, as it was capable of being put into operation rapidly over wide areas and would make a desirable improvement until a more permanent remedy could be applied. But he had always insisted that reconditioning should be accompanied by the provision of a proper system of management. As the reconditioning was to be done by the individual owners of individual houses, he saw no hope under the scheme of getting anything like standardization of management. He would like to see some non-elected body, something in the nature of a Commission, made responsible for the management of those small houses. Apparently, the Minister did not think it a matter of serious consideration.

The local authority would have a very difficult and thankless task when it attempted to fix differential rents for similar classes of houses.

Town Planning

Mr. Chamberlain, in common with other members, regretted that the Bill contained no town-planning provisions; but Mr. Greenwood, the Minister of Health, has since explained that he intends to introduce a Town Planning Bill as soon as opportunity is offered.

Smoke Abatement

Sir Samuel Hoare asked the First Commissioner of Works whether, in the interests of smoke abatement, it was the policy of the Government to substitute central heating for open fires in Government offices; and, if so, what progress was being made with the substitution.

Mr. Lansbury replied: It is the policy to instal central heating in all new Government buildings and gradually to substitute central heating for open fires in existing buildings in cases where, after taking into account interest and sinking fund charges in respect of the capital expenditure involved, some considerable economy would result. Provision had been made in the Estimates (Class VII) for 1931 for several cases of the latter type.

Marlborough House

Mr. Neil Maclean asked the First Commissioner of Works whether he could state the total cost of the alterations to Marlborough House.

Mr. Lansbury: The total expenditure on reconditioning Marlborough House, including the garages and other outhouses, was approximately £20,500. Of this, approximately £8,000 might be ascribed to alterations and improvements, the balance being for general re-decoration, external and internal repairs, re-wiring, etc.

Mr. Brangwyn's Panels

Mr. Horrabin asked the First Commissioner of Works whether, now that it had been decided that the paintings by Mr. Frank Brangwyn, R.A., executed under the bequest of the late Earl of Iveagh, should not be accepted for the Royal Gallery, he proposed to find some other position for these paintings in the Palace of Westminster.

Mr. Lansbury: The offer made by the late Earl of Iveagh was to fill the vacant panels in the Royal Gallery of the House of Lords with paintings. No offer has been received to decorate any other portion of the Palace of Westminster.

SOCIETIES AND INSTITUTIONS

HOSPITAL PLANNING

An account of recent developments in the planning and construction of a large variety of remedial institutions, including mental hospitals, buildings for the treatment of medical and surgical cases, cottage hospitals, etc., was given by Mr. C. Ernest Elcock, F.R.I.B.A., under the auspices of the South Wales Institute of Architects (Central Branch) and the Institute of Builders (South Wales Branch), at the Engineers' Institute, Cardiff.

Many of these schemes, he said, were on a very large scale and, particularly in the case of extensive out-patient departments, extremely elaborate in plan. He explained how recent developments in medical science had given the architect many new problems to solve, and he indicated directions in which the older type of hospital ward could be modified with advantage, and how, as a result of treating the forms which were arising out of the new requirements in a simple rational manner, many of the new hospitals were reaching a higher standard, aesthetically, than did the earlier buildings of this class.

BERKSHIRE SOCIETY OF ARCHITECTS

At the tenth annual general meeting of the Berkshire Society of Architects, the following officers were elected: Chairman, Mr. T. T. Cumming; vice-chairman, Mr. C. B. Willcocks; hon. librarian, Mr. H. Whiteman Rising; hon. treasurer, Mr. W. R. Morris; hon. secretary, Mr. W. J. Freeman; hon. auditors, Messrs. A. S. Cox and E. P. Morgan. Messrs. W. Roland Howell, J. T. Saunders, E. S. Smith and A. H. Powell were elected members of the society. Mr. T. T. Cumming was elected vice-president, and the following representatives of the society on the Council of the Berks, Bucks and District Architectural Association: Messrs. J. T. Saunders, J. R. Greenaway, A. Saxon Snell, S. E. Burrett, W. J. Freeman and W. R. Morris (Reading), A. B. West (Abingdon) and F. E. Wapshott (Maidenhead).

DRY ROT IN TIMBER

Mr. E. H. Boulton, M.A., M.C., of the Cambridge School of Forestry, lecturing at Maidstone on dry rot in wood, said that timber could become attacked by dry rot, which was a plant belonging to one of the lowest orders of the vegetable kingdom, from any period between the cutting of the tree to the time of its use for building, and even afterwards. He showed how the different fungi germinated, and said that in theory all timber should be treated with

some preservative if they wanted completely to keep away dry rot. To germinate, dry rot needed oxygen, water, temperature and food. The spores could remain dormant in timber for fourteen years, when perhaps a roof tile would come off, water would get in, and the spores would germinate. Over 50 per cent. of the timber used in this country today had fungus of some sort in it, but, fortunately, conditions were such that it rarely had a chance to develop. If they put in a damp course, had good ventilation and kept the timber dry, it had not an opportunity to develop.

Blueing fungus, he pointed out, was not detrimental as far as the strength of the timber was concerned, but red stripe was definitely a forerunner of dry rot.

R.I.B.A. ELECTION OF MEMBERS

At the last general meeting of the R.I.B.A. the following members were elected :

As Hon. Associates (2)

Alexander, S. A. — Goetze, S. C. H.

As Hon. Corresponding Members (2).

Pontremoli, E. — Sano, Dr. R.

As Fellows (18)

Benslyn, W. T. — Surman, J. B.
Brown, Col. J. — Wood, W. W.
Butler, C. G. — Worthington, J. H.
Cobb, R. S. — Currey, H. W.
Cullen, A. — Holmes, A. H.
Hughes, H. C. — Kesteven, L.
Owen, R. W. — Roberts, F. A.
Rollo, R. L. — Campbell, W.
Somerville, W. L. — Snowden, T

As Associates (43)

Boon, G. M. — Maynard, F. J.
Bradbury, R. — Murray, J. M.
Brenchley, A. R. — Neil, C. W.
Brentnall, R. H. — Nisbet, J. A. V.
Bright, G. E. — Patker, V. M.
Brown, C. W. — Phillipson, B. J. (Miss)
Butler, R. McC. — Price, G. L.
Carter, E. J. — Randall, G. F.
Cassells, G. A. — Rea, H. F.
Chaplin, J. P. — Segar-Owen, G. J. S.
Dower, J. G. — Shaw, R.
Duffy, T. — Shepherd, G. H.
Fletcher, J. (Miss) — Smeed, C. W. J.
Grayson, A. B. — Somake, E. E.
Haskins, A. D. A. — Stanley, L. S.
Hughes, J. L. — Steele, F. R.
Johnson, A. — Tassell, G. E.
Kemp, S. J. — Taylor, G. S.
Kininmonth, W. H. — Westerman, A. E.
MacDonald, H. S. — Wheeler-Carmichael, S. D.
McMullen, A. L. —
Martin, J. L. — Young, W. E.

VICTORY SCHOLARSHIP AND THE TITE PRIZE COMPETITIONS

The R.I.B.A. announce that in the United Kingdom forty-five students took part in the preliminary competition for the Victory Scholarship, and 198 students took part in the preliminary competition for the Tite Prize. The following students have been selected to take part in the final competitions :

The Victory Scholarship

Hilary Archer (Miss) (Liverpool School of Architecture, University of Liverpool).
C. L. Fairless (Liverpool School of Architecture, University of Liverpool).
William Holford (Liverpool School of Architecture, University of Liverpool).
George Kenyon (Liverpool School of Architecture, University of Liverpool).
Brian B. Lewis (Liverpool School of Architecture, University of Liverpool).
E. F. Massey (School of Architecture, University of Manchester).
R. H. Matthew (School of Architecture, Edinburgh College of Art).
J. V. Nisbet (School of Architecture, the Architectural Association).
Stanley H. J. Roth (School of Architecture, the Architectural Association).
E. F. Starling (Bartlett School of Architecture, University of London).
Gordon Stephenson (Liverpool School of Architecture, University of Liverpool).
C. A. E. Thatcher (Welsh School of Architecture, the Technical College, Cardiff).

The Tite Prize

A. M. Best (Liverpool School of Architecture, University of Liverpool).
John Brandon-Jones (School of Architecture, the Architectural Association).
John Campbell (School of Architecture, Glasgow).
Dudley G. Cutler (School of Architecture, the Architectural Association).
Reginald Edmonds (School of Architecture, Birmingham).
Alwyn G. S. Fidler (Liverpool School of Architecture, University of Liverpool).
H. J. Forbes (Liverpool School of Architecture, University of Liverpool).
Rolf Hellberg (School of Architecture, Birmingham).
R. Pearce S. Hubbard (Liverpool School of Architecture, University of Liverpool).
Albert E. Jones (Department of Architecture, Building and Surveying, the Northern Polytechnic, London).
Kenneth W. Judd (Department of Architecture, Building and Surveying, the Northern Polytechnic, London).
John Needham (School of Architecture, Leeds College of Art).
David S. Paterson (School of Architecture, Glasgow).
Myerscough Walker (School of Architecture, the Architectural Association).
R. H. Whistler (School of Architecture, the Architectural Association).
J. D. Wylson (School of Architecture, the Architectural Association).

READERS' QUERIES

TREATMENT OF OAK

W. T. writes : "*I have some new solid half-timber work in English oak, which I wish treated in such a way that I can obtain a permanent dark brown colour. Can you advise me as to the best method to obtain this effect ?*"

The oak half timber will be best stained with dark brown Solignum to give the effect desired by W. T. Permanency, however, is hardly possible, as may be observed on oak fencing, where the action of sun, rain, etc., usually bleaches the oak of its stain. It is always possible of course to apply further coats of Solignum, which is the usual course.

I, personally, would prefer another treatment which avoids this very dark, and as I think, unnatural appearance of the oak.

Whether the spaces between the framing be filled with brick or plaster, I always prefer the appearance of oak that has first had an application of caustic soda solution, followed, after a few days, by a coat of slaked lime; this latter being brushed off when dry. This will give a weathered grey-brown tone which the action of the elements will enhance.

J. C. R.

PRESERVING AND CLEANING A PITCH-PINE FLOOR

F. J. R. writes : "*I have, in my living-room, a pitch-pine floor which, probably from over-waxing, has become rather dirty. Could you inform me how to clean it properly and mention something about its care ?*"

From the wording of the inquiry I gather that the pitch-pine floor is unstained, and waxed natural colour. If this is so, and it is desired to clean the surface entirely, a wash and scrub with hot soda-water and soap will do it; but I rather gather that the effect of the wax polish is to be retained and that dirt, etc., trodden into the wax is to be cleaned off. This can be done by sprinkling pumice powder on the wood and rubbing with a pad soaked in turps, followed by a rub over by a clean rag dipped in turps to wipe off all powder, etc. Leave to dry, then brush over with a soft broom, and wax polish with Ronuk or some other light-coloured wax.

In the course of time it is impossible to avoid a certain darkening of the surface due to dirt working into the polish. This is seldom objected to, but a cleaning off as described may be done once a year or so ; though it inevitably destroys for the time being the gloss obtained by previous polishing.

J. C. R.

CUBIC COST OF BUILDINGS

"Cost" writes : "*Can you give provincial prices per cube foot for : Technical secondary schools in brick and stone design ; municipal offices, all stone ; fire brigade stations, brick with stone dressings ; police station (if any post-war) ?*"

Locality and design play an important part in the cost of buildings, and even when in possession of drawings and specification of a proposed building it is still extremely difficult to judge within reason the price per foot cube of the ultimate cost.

However, as a rough indication, the following figures may be a guide :

Technical and secondary schools in brick with stone dressing, 1s. 3d. per foot cube.

Municipal offices in stone in stone localities, 2s. 6d. per foot cube.

Fire brigade stations in brick with stone dressings, 1s. 6d. per foot cube.

Police stations in brick with stone dressings, 1s. 6d. per foot cube.

B. O. F.

Should District Surveyors Draw Plans?

AT a recent meeting of the Urban District Council of Bentley, near Doncaster, the question whether the district surveyor, Mr. P. C. Woodhall, was in order in drawing plans of private work was keenly debated. The subject—one of interest both to architects and surveyors—was brought up at the instance of Mr. Oliver Straw, representative of one of the wards. The following is a condensed account of the proceedings :

Mr. Straw was given permission to ask questions on the minutes and referred to a recommendation prohibiting the drawing of private plans being done on Council premises and during Council hours. He asked if the chairman knew whether an official had received payment.

The Chairman replied that he heard of a case some years ago.

Mr. Straw asked if he would be right in drawing a conclusion that there had been a breach of faith.

The Chairman said there would be a breach of faith if such a thing had taken place since the committee decided on prohibition during Council time and on Council premises. Later, he said he had no reason to believe that there had been a breach of the recommendation.

Mr. Straw said it would be interesting to know the proportion of private plans drawn in the Council office. He alleged that the cost of the surveyor's department was too heavy and there were too many assistants. When he first raised this matter he was not satisfied with the answer. He asked whether the surveyor had received payment for plans for people who built privately.

The Surveyor said the plans referred to at the previous meeting were for two cottages, and were not drawings but photographs taken by a Doncaster photographer. All that was done was that his pupil put a wash of colour on them.

Mr. Straw said that when the Council appointed the surveyor they laid it down definitely that such work should not be done. He asked the surveyor if, at any time, as an official of the Bentley Council, he had received remuneration for the drawing of plans for residents in that area.

The Surveyor : As I told the sub-committee, the answer is definitely in the affirmative.

Mr. Straw said he was astounded and disgusted, knowing what wages Bentley Council paid for the services of a chief official.

The Surveyor : I strongly object to that. I consider that is taking advantage of my position.

Mr. Straw said for a man to receive a salary second to none as a surveyor to an urban authority, and to receive payment for drawing plans, was hitting below the belt in the profession, and depriving other men of an honest pound or two.

Mrs. Ringrose asked the sanitary inspector if he had drawn plans.

The Sanitary Inspector (Mr. W. B. Jepson) admitted he had, and received payment. He said his action had been to the advantage of the people for whom the work was done.

Mr. W. E. Shelton said that after the recommendation of the committee on this matter he had hoped the matter would be allowed to drop. He had hoped that they would continue in harmony. He alleged that Mr. Straw was seeking self-aggrandisement and seeking to lower the officials of the Council in the eyes of the public, and asked why the honour of officials should be dragged out at a public meeting?

The Chairman (Mr. W. J. Ballam) said it appeared that Mr. Straw was disappointed because the committee did not take up a lot of disagreeable things and hurl threats instead of trying to improve the position in the Council. He condemned the continuation of this vendetta, and said the drawing of plans was a custom in existence in the profession all over the country, and he questioned whether they could find a surveyor who did not carry on such work. He doubted whether another authority in the county had told their surveyor that he must not do so.

Mr. Straw sought to reply, but the Chairman told him there was no resolution before the meeting.

Mr. Straw then moved a vote of censure upon the surveyor and sanitary inspector for drawing the plans.

There was no seconder to the resolution and the Surveyor said if the matter was to continue in mud-slinging he would retain his dignity and say no more.

COMPETITION CALENDAR

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated this year. Assessors : Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums : £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs : April 28.

May 16.—Messrs. Ewart and Son, Ltd., in conjunction with the Association of Architects, Surveyors and Technical Assistants, invite designs for a lock-up hangar for an aeroplane. The competition is divided into two classes, for those over and under 25 years of age at midnight, May 15–16, 1930. Assessors : William H Hamlyn, A.R.I.B.A., and Chas. McLachlan, A.R.I.B.A., with A. N. Cathcart as technical adviser with regard to roofing, ventilation and hot-water supply. Two prizes will be awarded in each class, namely, free places in the A.A.S.T.A. party to Madrid in September, including second-class rail and steamboat travel throughout and all hotel expenses, except personal expenses. Messrs. Ewart and Son, Ltd., reserve the right to publish or make use of any of the designs for which a prize is awarded, but do not reserve the right to build in accordance with any of them. Particulars of the competition, etc., are obtainable from A. Seymour Reeves, Secretary, A.A.S.T.A., 26 Buckingham Gate, S.W.1. Latest date for submission of designs : May 16, 1930.

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs : June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor : J. Ernest Franck, F.R.I.B.A. Premiums : £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs : June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor : Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor : H. V. Ashley, F.R.I.B.A. Premiums : £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs : July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall which is to be built on the site of the old town hall, at an approximate cost of £250,000. Assessor : Sir Brumwell Thomas. Premiums : £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs : July 31.

No date.—The Leicester Corporation invites local architects to submit designs for the erection of a library at West Humberstone. Assessor : Hugh Gold, F.R.I.B.A. Premiums : £75, £50, and £25.

TRADE NOTES

The Egyptian Government Ministry of Public Works have accepted the tender of Dorman Long & Co., Ltd., for the erection of a steel-framed power station at Atf, in Lower Egypt, about 70 miles from Alexandria, along the Mahmudieh Canal. The building will contain approximately 770 tons of steel.

Mr. T. P. Sturdee has been appointed London Manager for Messrs. Banister, Walton & Co., Ltd., constructional engineers and stock holders, 82 Victoria St., Westminster, and of Trafford Park, Manchester. The firm have also inaugurated a London designing and drawing office.

At a board meeting of Messrs. Dorman Long & Co., Ltd., held recently, Mr. Charles Mitchell was appointed joint managing director. He will, however, continue in charge of the bridge and constructional departments, at 55 Broadway, Westminster, S.W.1, the company's London office.

Spraying is being used to a considerable extent today by the modern decorator. It is speedy compared with older methods of painting, and effects can be obtained in shading and in blending one colour into another. In the latter case it is often difficult to say where one colour ends and the other begins. Not only is cellulose sprayed today by Messrs. Goodworks, Ltd., but paint, distemper and bronze, gold and silver powders. Small surfaces, such as window frames, etc., can be sprayed as well as large ones. Paint, distemper, etc., when applied correctly by means of a spray is claimed to have not only an even coat but better covering power, two sprayed coats, it is stated, being generally recognized to equal three brushed coats. On large contracts, it is claimed, the price for spraying is very keen, and often cheaper than the old method, and even on small contracts it is said to be very favourable.

On this page is illustrated the Alpine scenic wall at the new Ice-Drome, Hammersmith. Instead of being a smooth-painted representation of the Alpine skyline, it has been given a third-dimension treatment, which is so valuable in scenic effects. This is achieved by treatment with Berger Surfex, a plastic paint which gives a rugged texture. The work was carried out by Messrs. G. F. Holding, Ltd., of Brooks's Bar, Manchester.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors, specialists, and some of the sub-contractors for the buildings illustrated in this issue :

New Chapel, Sutton Valence School, Kent (pages 598, 601-606). General contractors, R. Corben and Sons, who were also responsible for most of the internal fittings. Sub-contractors : The Trussed Concrete Steel Co., Ltd., Reinforced Concrete Engineers, reinforced concrete; Henry Hope and Sons, Ltd., casements and leaded lights; Clubb and Sons, and Frederick Jukes, wrought-iron work; Thomas Elsley, Ltd., rain-water heads; A. E. Davis, ironmongery; Berkeley Electrical Engineering Co., Ltd., electric lighting; General Electric Co., Ltd., and Osler and Faraday, Ltd., electric fittings; W. Stainton, heating; Oetzmann & Co., Ltd., hanging to altar; Joseph Armitage, wood carving; H. J. Cribb, stone carving; the altar was the work of Mr. Richards, manual instructor, and the boys of the school.

Barclays Bank, 414-416 Kennington Road, S.E.11 (pages 616-618). General contractors, Hall, Beddall & Co., Ltd., who were also responsible for most of the internal fittings, counters, etc. Sub-contractors: G. M. Callender & Co., dampcourses ; Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt; Wm. Brown and Son, bricks; Empire Stone Co., Ltd., artificial stone and stairtreads; South Western Stone Co., Ltd., stone; Aston Construction Co., Ltd., structural steel; Morris and Son, Ltd., glass; Stevens and Adams, Ltd., woodblock flooring; Siegwart Fireproof Floor Co., Ltd., patent flooring; Colley, Meikle & Co., Ltd., central heating; Grierson, Ltd., electric wiring and electric heating; Holophane, Ltd., electric light fixtures; Tylors, Ltd., sanitary fittings; Buckley, door furniture; R. E. Pearse & Co., Ltd., casements; Plaster Decoration Co., Ltd., plaster; Galsworthy, Ltd., metalwork; Fenning & Co., Ltd., marble; Waygood-Otis, Ltd., lifts.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

9838. Black, W. J., and Chisholm, W. D., and Dickins, A. S. Manufacture of floorings, pavings, etc. March 27.

9541, 9543. Concrete Greenhouses, Ltd. and Rawson, C. H. Concrete building construction. March 25.

9540. Concrete Greenhouses, Ltd., and Rawson, C. H. Sills for building construction. March 25.

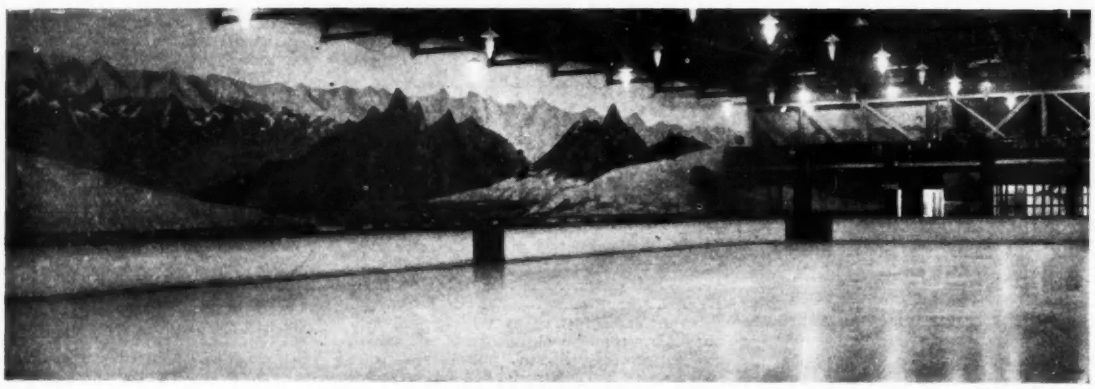
9897. Doughty, H. E. Treatment of brick, concrete, etc., surfaces. March 28.

ANNOUNCEMENTS

The Order-in-Council made on December 17 last requiring any container in which imported Portland cement is sold or exposed for sale to bear an indication of the country of origin, came into operation on March 17.

For the convenience of motorists wishing to avoid touring from town to town for the Easter holidays, the Automobile Association has prepared special descriptive drives giving six day tours from each of 200 centres. These booklets are supplied free to members on application to the A.A., Fanum House, New Coventry Street, W.1. The number of A.A. badges issued to members has now passed the one million mark.

The Fireplace in a House at Ditchling, Sussex (pages 595–6), is reproduced from *The Elements of Domestic Design.* The illustration of an elm avenue in Hampshire (page 612) is reproduced from *The Face of the Land : The D.I.A. Year Book.*



The Alpine scene in the Hammersmith Ice-Drome, W.

THE ARCHITECTS' DIARY

WEDNESDAY, APRIL 16

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. "Ultra-Violet Ray Transparent Window Glass." By S. English. **8 p.m.**

INSTITUTION OF CIVIL ENGINEERS, Great George Street, Westminster, S.W.1. "Weymouth: Bincleaves Firing Station; Repairing and Strengthening of Reinforced-Concrete Pier." By Peter A. Scott, B.SC., STUD.INST.C.E. F. E. Wentworth-Shields, O.B.E., M.INST.C.E., will preside. **6.30 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Exhibition of Photographs of Continental Sculpture. 10 a.m. to 6 p.m. Until April 17. **10 a.m.**

MANSARD GALLERY, 196 Tottenham Court Road, W.1. Exhibition of Modern Glass and Colour Prints, Mansard Annexe. Exhibition of Landscape Painting. Open until April 17.

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday, and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

IDEAL HOME EXHIBITION, Olympia, W. Organized by *The Daily Mail*. Open until April 17.

NORTHERN ARCHITECTURAL ASSOCIATION. Cumberland Branch. At the Art Gallery, Tullie House, Carlisle. Exhibition of R.I.B.A. Students' Prize Drawings. Until April 19.

GOOD FRIDAY, APRIL 18

R.I.B.A., 9 Conduit Street, W.1. Office and Library closed until Tuesday, April 22 (inclusive).

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Five-day Tour to Amsterdam.

SATURDAY, APRIL 19

Sunrise, 5.57 a.m. Sunset, 8.2 p.m.

EASTER MONDAY, APRIL 21

WEDNESDAY, APRIL 23

KING'S COLLEGE, Strand, W.C.2. College term begins. **10 a.m.**

THURSDAY, APRIL 24

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. Exhibition of Architects' Drawings of 1800–1850. 10 a.m. till 8 p.m. Saturdays 10 a.m. till 5 p.m. Exhibition closes on May 24. **10 a.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Architecture in its Relation to Modern Life." By Alfred C. Bossom, F.R.I.B.A. **6.30 p.m.**

FRIDAY, APRIL 25

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

TOWN PLANNING INSTITUTE, Caxton Hall, Caxton Street, Westminster, S.W.1. "Road Surface Design." By G. L. Pepler, F.S.I. To be followed by a discussion. **6 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. West Wales (Swansea) Sub-Centre. "Surge Investigations on Overhead Line and Cable Systems." By S. W. Melsom, A. N. Arman, B.SC. (ENG.), and W. Bibby, B.SC. (ENG.).

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the works of Kodak, Ltd., Wealdstone. **2.15 p.m.**

SATURDAY, APRIL 26

Sunrise, 5.43 a.m. Sunset, 8.14 p.m.

MONDAY, APRIL 28

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Architects' Drawings of 1800–1850." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. 8 p.m. Meeting of the Executive Committee. 4 p.m. **4 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. General Meeting. "Aerial Surveying and Archæology." By O. S. G. Crawford. 8 p.m. Exhibition of Wall Papers. 10 a.m. till 10 p.m. **10 a.m.**

NATIONAL FEDERATION OF RETAIL FURNISHERS, 11 Tavistock Square, W.C.1. Annual Dinner to be held at the Trocadero Restaurant, W.1.

TUESDAY, APRIL 29

R.I.B.A., 9 Conduit Street, W.1. Last day for receiving applications for the Intermediate Examination.

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the Armourers' and Brasiers' Company, 81 Coleman Street, E.C.2. **3 p.m.**

LONDON UNIVERSITY Term begins. **10 a.m.**

WEDNESDAY, APRIL 30

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Annual General Meeting. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

THURSDAY, MAY 1

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Annual General Meeting. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S.

FRIDAY, MAY 2

NATIONAL SMOKE ABATEMENT SOCIETY, 71 Eccleston Square, Westminster, S.W.1. "By-laws under section 5 of the Public Health (Smoke Abatement) Act, 1926." By C. J. Allpass, L.C.C. To be followed by a discussion. **3.30 p.m.**

ROYAL SANITARY INSTITUTE. At the Town Hall, Tunbridge Wells. Tea, 5 p.m. Discussion on: "Can the Slum be Abolished?" to be opened by H. T. Taylor, M.S.I.A. 5.30 p.m. Edward Willis, M.INST.C.E., F.S.I., M.INST.T., will preside. **5 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Meter and Instrument Section. "The Metering Arrangements for the 'Grid' Transmission System in Great Britain." By C. W. Marshall, B.SC. **7 p.m.**

SATURDAY, MAY 3

Sunrise, 5.30 a.m. Sunset, 8.24 p.m.

ROYAL SANITARY INSTITUTE. At Tunbridge Wells. Meet at Town Hall for visit to the premises of the New Maternity Home, 10–12 Calverley Park Gardens, where the architect, A. S. Killby, F.R.I.B.A., will give a brief address. 9.45 a.m. Visit to the Isolation Hospital. 10.45 a.m. Light refreshments will be provided. **9.45 a.m.**

MONDAY, MAY 5

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition opens to the public.

TUESDAY, MAY 6

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Luminous Traffic Signals." By T. Austin. (Light refreshments at 6.30 p.m.) **7 p.m.**

WEDNESDAY, MAY 7

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "National Parks." By S. K. Ratcliffe. Sir Fabian Ware, K.C.V.O., K.B.E., will preside. **8 p.m.**

THURSDAY, MAY 8

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. Ordinary and Annual General Meetings. **6.30 p.m.**

FRIDAY, MAY 9

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual General Meeting. "The Rotary Automatic Telephone System." By J. W. Moffatt and J. C. Emerson. **6.15 p.m.**

SATURDAY, MAY 10

Sunrise, 5.18 a.m. Sunset, 8.36 p.m.

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Annual General Meeting. Address by G. C. Laurence, F.R.I.B.A., R.W.A., Chairman of Allied Societies Conference. **6.15 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 12

R.I.B.A., 9 Conduit Street, W.1. Ninety-Sixth Annual General Meeting. **8 p.m.**

WEDNESDAY, MAY 14

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Annual Dinner at the Hotel Victoria, Northumberland Avenue, W.C.2. The Earl of Crawford and Balcarres will preside. 7.30 for 7.45 p.m. (Tickets 12s. 6d. each.) **7.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art to be opened by the Archbishop of Canterbury.

LONDON UNIVERSITY Presentation Day. Albert Hall. **2.30 p.m.**

THURSDAY, MAY 15

R.I.B.A., 9 Conduit Street, W.1. Annual Dinner to be held at the Guildhall, E.C.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual General Meeting, 6 p.m. Irish Centre (Dublin). At the Physical Laboratory, Trinity College, Dublin. Annual General Meeting, 7.45 p.m. Hampshire Sub-Centre. At Southampton, Summer Meeting. **6 p.m.**

FRIDAY, MAY 16

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Technical College, Dundee. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S. **7.30 p.m.**

SATURDAY, MAY 17

Sunrise, 5.6 a.m. Sunset, 8.47 p.m.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Second visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

THE SKETCH CLUB

SUCH is the title of a supplement which will adorn every other issue of THE ARCHITECTS' JOURNAL from next week's onwards. As this title is meant to indicate, the new supplement will be a club and will contain sketches. It will, therefore, be the natural meeting-place of those architects who sketch and find pleasure therein. The holiday sketcher and the office sketcher, the heavy sketcher and the occasional one, the convivial and the secret sketcher, the professional and the stickler for amateur status—all without exception will here come together to praise and practice the noble sport of sketching.

It is too true that the camera, like war-debts and the motor-car, has come to stay. Moreover, it would be idle for the lovers of sketching to try and dislodge it. It would also be dangerous. Imagine modern architecture without the camera! Imagine THE ARCHITECTS' JOURNAL without its photographs! But in a thousand architectural workshops throughout the country the japanned colour-box still reposes on the little pile of canvas-bound books. These things have remained to testify that old loyalties are not forgotten, and that the photograph and blue-print have not yet obtained a traffic monopoly for architectural ideas.

There may be a great deal to be said against sketching; there is also a great deal to be said for it. We ask the scornful ones to suspend judgment till *THE SKETCH CLUB* has been busy for three months or so. We promise them that at the end of that period they shall have a proper hearing.

Meanwhile, the first meeting will take place in THE ARCHITECTS' JOURNAL on

WEDNESDAY, APRIL 23.

All who have ever sketched, tried to sketch or contemplated sketching, whether for business or pleasure, are cordially invited to attend.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

Plans passed by the BARKING U.D.C.: Eleven shops with dwelling accommodation, Becontree Estate, for the London County Council; factory, River Road, for Invictus Flooring Co., Ltd.; twenty garages, rear of Norfolk Road, for Mr. C. B. Lovell; temporary church, Urswick Road, Becontree Estate, for the Church of England Authorities; lay-out, Lodge Road, Porter's Avenue and Goresbrook Road, for the L.C.C.

The L.C.C. has revised its scheme for the development of the Barking section of the BECONTREE Estate. The scheme will comprise the erection of 1,497 dwellings and 39 shops.

For the erection of further tenements on the Collingwood estate, BETHNAL GREEN, the L.C.C. has voted an expenditure of £150,000. The dwellings will be of the normal type, five stories in height.

Plans passed by the COULSDON U.D.C.: Four houses, Bradmore Way, for Mr. F. Everitt; house, Caterham Drive, for Mr. R. C. Older; twenty-five houses, Portnalls Road, for Messrs. Gresswells, Ltd.; five houses, New Barn Lane, Beverley Road, and Hilltop Road, for Messrs. E. O'Sullivan, Ltd.; house, Coulsdon Road, for Mr. F. A. Freeman; house, Winifred Road, for Mr. D. M. G. Yuille; house, Coulsdon Common, for Miss V. O. Dent.

The CROYDON Corporation has obtained sanction for a loan of £20,000, for the erection of baths in Mitcham Road.

Plans passed by the EAST HAM Corporation: Office, rear of 203 High Street North, for Mr. A. Webb; two houses, Michigan Avenue, for Mr. T. W. Bedford (architect); house, Mountfield Road, for Mr. W. F. Blake (architect); four houses and workshop, Kennard Street, for Messrs. W. Harris, Ltd.; shop and timber store, 772/4 Romford Road, for Mr. F. Amott (architect); mission hall, corner Flanders Road and Bonny Downs Road, for Mr. W. J. Cearns; house, Ranelagh Road, for Mr. T. W. Ebdell; builders' store and workshop, 3 Boleyn Road, for Messrs. W. Beattie, Ltd.; alterations, 165 High Street North, for Messrs. Hammond and Miles, Ltd.; shop, Green Street, Upton Park Station Bridge, for Messrs. Lee, Dickens & Co.

Plans passed by the HACKNEY B.C.: Shop, Mare Street, for Mr. F. T. Ford; twelve houses, Warwick Road, and five houses, Knightland Road, for Mr. G. G. Winbourne; pavilion, ground rear of Holmleigh Road, for Ea Tout Cas (Syston), Ltd.; weir-keeper's cottage, Strong's Bridge, South Millfields, for Mr. B. Howarth; motor coach station, Stamford Hill, for Messrs. Pite, Son and Fairweather.

Plans passed by the LEWISHAM B.C.: Eight houses, Chudleigh Road, and three houses, Ladywell Road, for Mr. J. H. Bolton; thirty-two houses, Perry Hill, for Mr. B. G. Utting; rebuilding, 175 Rushey Green, for Mr. J. H. Willis; four houses, Collingtree Road, for Mr. G. A. Clothier; reconstructing Bridge Mill, Mill Road, for The Power Construction Co., Ltd.; church hall, Downham Way, for Mr. W. E. Ismay; additions, "Tiger's Head," public house, Bromley Road, for Mr. A. R. Mayston; garages, rear of Sunderland Road, for Messrs. Gledhill Bros.

The L.C.C. has passed plans, submitted by Messrs. L. G. Mouchel and Partners, for the erection of buildings in Rathbone Place and Cresse Street, MARYLEBONE.

Plans passed by the MARYLEBONE B.C.: Vaults, 104/108 Oxford Street, for Messrs. Slater and Moberly; reconstruction of vaults, 12 Ogle Mews, for Messrs. Weir, Borrows and Weir; building, Hall Road, for Mr. D. W. Beck; alterations and additions, 69/71 Margaret Street, for Mr. M. Seth-Ward.

The L.C.C. has passed revised plans for the erection of premises, for Messrs. A. W. Gamage, Ltd., in OXFORD STREET, Park Street and North Row.

Plans have been passed at SANDERSTEAD for new streets on the Borough Farm Estate, for Mr. D. A. Bowerman.

Plans passed at SELSDON: Twelve houses, Dulverton Road, for Mr. E. D. Astington; thirty-seven houses, Sylvan Close, Selsdon Road and Addington Road, for Messrs. Steel and Howes.

The STEPNEY B.C. has obtained land in Brightlingsea Street, for the erection of tenements.

The L.C.C. has prepared a scheme for culverting part of the River Graveney, in the vicinity of WANDSWORTH, at a cost of £60,000.

Messrs. Grace and Farmer are to erect new buildings on a site with frontages to Approach Road, Milford Lane, Tweezers Alley and Water Street, WESTMINSTER.

Plans passed by the WESTMINSTER City Council: Shelters, Leicester Square Theatre, St. Martin's Street, for Mr. A. Mather; building, 107 Piccadilly, for Messrs. Henry Tanner; fascia and pilasters, 27-29 Berwick Street, for Messrs. A. Davis & Co., Ltd.; balconies, 38–40 Piccadilly and 1–5 Sackville Street, for Mr. A. Mather; shop addition, 4 Tilney Street, for Messrs. Bomer and Gibbs; balcony, 43 Conduit Street, for Messrs. White, Druce and Brown.

SOUTHERN COUNTIES

Plans passed by the EASTBOURNE Corporation: Two houses, Victoria Drive, for Messrs. Clarke and Worsfield (architects); alterations and additions, "Rose and Crown," Marine Drive, and offices, St. Leonard's Wharf, Whitlow Road, for Mr. A. Ford (architect); alterations, 38–40 Seaside, for Mr. B. Stevens (architect); two houses, Longland Road, for Mr. A. J. Fellows (architect); alterations, 192 Seaside, for Messrs. J. Thurlow and Sons; two houses, Dillingburgh Road, for Messrs. A. J. Bessant, Ltd.; four houses, Percival Road, Hampden Park, for Mr. R. Stevens (architect); house, Prideaux Road, for Mr. C. Ford (architect); additions, "Arlington Arms," Seaside, for Messrs. Harvey and Son; shop, Albert Parade, Green Street, and three houses, Torfield Road, for Messrs. P. D. Stonham and Son (architects); garage, showroom, etc., South Street, for Messrs. Willett's Ltd.; house, Pashley Road, for Mr. J. Bowley (architect); four houses, Crunden Road, for Mr. W. R. Hamblyn (architect); three houses, Longland Road, for Mr. F. C. Benz (architect); alterations and additions, Sussex Stores, Terminus Road, for Mr. R. O. Slipper (architect).

The EASTBOURNE Corporation is to erect three electricity sub-stations, at a cost of £7,500.

Plans passed by the HASTINGS Corporation: Alterations, 20 Norman Road, St. Leonards, for Mr. H. Burleigh (architect); four houses, Burry Road, St. Leonards, for Messrs. Ward, Son and Wray (architects); extension of garage, 161–2 Queen's Road, for Mr. P. H. Oxley (architect); house, Amherst Road, St. Leonards, for Messrs. Callow and Callow (architects); house, Priory Road, and house, Greville Road, for Mr. J. Hunt (architect); additions, 15 Markwick Terrace, St. Leonards, for Mr. T. F. Amery (architect); additions, the Adelphi Hotel, Warrior Square, St. Leonards, for Messrs. Ward, Son and Wray (architects); additions to offices, Queen's Road, for Mr. C. F. Botley; two houses, private road off Red Lake, for Mr. H. W. Coussens (architect).

Messrs. Henry Ward, Son and Wray, architects, are developing an estate for Mr. A. Honnor, at Barry Road, HASTINGS.

The PORTSMOUTH Corporation has decided to reserve additional land on the East Wymering Farm, for the erection of houses.

In connection with the Cosham abattoir scheme, the PORTSMOUTH Corporation has decided to construct a sewer, at a cost of £12,000.

Plans passed by the PORTSMOUTH Corporation: Showrooms, Portland Road, for Messrs. Handleys, Ltd.; four houses, Kirby Road, for Mr. J. Wedge; twelve houses, Kenyon Road, for Mr. W. J. Daniels; eight houses, Amberley Road, for Messrs. Dye Bros.; twelve houses, Domum Road, for Messrs. Tanner Bros.; three new streets, off Copnor Road, for Mr. W. J. Light; boiler-house and additions, Granada Road, for Messrs. John Lay & Co., on behalf of Messrs. Haigs Motors, Ltd.; public-house, Highbury estate, Cosham, for Portsmouth and Brighton United Breweries, Ltd.; six houses, Compton Road, for Mr. H. E. Collins; store, 40 Middle Street, for Portsmouth Printers, Ltd.; additions, 102 Lake Road, for National Mutual Aid Society; engineering shop, Goldsmith Avenue and Haslemere Road, for Messrs. J. Evans and Son.

SOUTH-WESTERN COUNTIES

The BRISTOL Corporation and the G.W.R. have made arrangements for the reconstruction of various bridges in the city, at a cost of £60,000.

The trustees of the Pilley Chapel, CHELTENHAM, have obtained land for extensions in Pilley Lane.

Plans passed by the CHELTENHAM Corporation: Shopfront and new entrances, Bennington Street, for Mr. David Davies; two houses, Pilford Avenue, and twelve houses, new road off Old Bath Road, for Messrs. Bendall and Sons; additions, rear of Stratford House, Suffolk Square, for Mr. W. Edwards; eight houses, Whaddon Road, for Naunton Estates, Ltd.; additions, the Crown inn, Gretton, for Messrs. Barnard and Partners (architects); mission room, Swindon Road, Prestbury, for Mr. J. Baghot De la Bere; showroom and garage, Bath Road, for Messrs. Reed and Patterson; house, Painswick Road, for Mr. E. Mortimer; office and store, adjoining Whitfield Cottage, off Naunton Lane, for Mr. T. W. Smith; bank, High Street, for Major S. W. Bowle Evans; alterations and additions, Naunton Park Schools, Naunton Lane, for the Education Committee; alterations and additions, Old Wellington Bar, Bath Road, for Mr. D. Winn; additions, Leckhampton Schools, Hall Road, for the managers.

The PORTLAND U.D.C. is to acquire land in Victoria Road, for the erection of ten houses.

EASTERN COUNTIES

The COLCHESTER Corporation has purchased land on the Austin estate, for the erection of fifty-five houses.

The COLCHESTER Corporation has obtained sanction for a loan of £4,600 for the purchase of a housing site in Harwick Road and the construction of roads and sewers.

Plans passed by the COLCHESTER Corporation: House, Layer Road, for Mr. James Roberts; house, Parson's Heath, for Mr. C. H. Green; three houses, Ipswich Road, for Messrs. H. G. Pryke and Son; house, Drury Road, for Messrs. Appleton and Sons; two houses, Gladwin Road, for Messrs. Grimsey Brothers; additional laundry buildings and boiler house, Ipswich Road, for Messrs. Duncan Clark and Beckett, on behalf of



A view from the south-east of the additions to "The Knoll," Shiplake. Designed by Leonard V. Hunt. The new portion is seen to the west, the left-hand side, of the loggia. For ground floor plan, see page 627.

Colchester Steam Laundry and Carpet Beating Co., Ltd.; gymnasium, school room and additional sanitary accommodation, Endsleigh House School, Lexden Grange, Lexden Road, for Messrs. Duncan Clark and Beckett; sports pavilion, Colchester Royal Grammar School playing-field, Park Road, for Mr. John Stuart; alterations and additions, 123 High Street, for Mr. D. J. McPherson Burton; alterations to mission hall (amended plan), Canterbury Road, for Mr. A. R. Cornell, on behalf of the churchwardens of St. Stephen's Church; additions, 109-111 Barrack Street, for Messrs. Henry Everett and Sons; addition to Labour Club, Belle Vue Road, for Mr. T. J. Smith; alterations to shop, St. John's Street, for Messrs. E. A. Cook and Sons; two shops, London Road, for Mr. A. T. Clark.

MIDLAND COUNTIES

The BURTON-ON-TRENT Corporation Housing Committee has received sanction to borrow £12,790 for the erection of twenty-eight houses on the Anglesey Road site.

The Warwickshire C.C. has voted £3,500 for the reconstruction of the railway bridge at BEDWORTH.

The NORTHAMPTON Corporation recommends the purchase of thirteen acres of land at Harborough Road, for housing purposes.

Plans passed by the NORTHAMPTON Corporation: Additions to offices, Wycliffe Road, for Messrs. Hornby and West, Ltd.; storeroom to shop, 26 Newland, for Messrs. N. and J. R. Bird; extensions to St. Saviour's Home, High Street, Kingsthorpe, for Peterborough Diocesan Society; house and four shops, Bridge Street, Cotton End, for Mr. C. T. Vernon; house, Harlestone Road, for Mr. W. G. Lewis; four garages, Cecil Road, for Messrs. Griffin and Kingston; alterations and additions, 8 Clarence Avenue, for Messrs. H. Holloway and Sons; house, Boughton Green Road, for Mr. E. Prosser; extensions and alterations to shop, 140 Abington Avenue, for Mr. T. H. Bennett; motor house, rear 117 Ardington Road, for Northampton Co-operative Society, Ltd.; additions to workshop, rear Clare Street, for Mr. C. Ashby; conversion of premises into offices, Wood Street, for Messrs. A. R. and W. Cleaver; alterations and additions, 35 College Street, for Northampton Religious and Useful Knowledge Society; twenty-three houses, Trinity Avenue and Murray Avenue, for Messrs. Chowns, Ltd.; alterations and additions, 2–6 Gold Street, for Boots Pure Drug Co., Ltd.; alterations and additions, 16–20 Gold Street, for Montague Burton, Ltd.; extension of polish factory, Great Russell Street, and 115 Overstone Road, for Messrs. C. E. Cook & Co.; eighteen houses, Barry Road, for Messrs. W. J. Richardson and Son; alterations, the Vine Inn, Abington Street, for Messrs. Campbell Praed & Co., Ltd.; shopfront to house, 84 Stanhope Road, for Mr. R. W. Billing; balcony and staircase, Newland, for the Temperance Hall Cinema, Ltd.; two houses, Abington Avenue, for Mr. W. H. Frost; alterations and additions, the Brewery, Bridge Street, for Northampton Brewery Co., Ltd.; house, Weston Way, Weston Favell, for the Exors. of Mr. H. Green.

The Warwickshire C.C. has included a sum of £90,000 in estimates for the widening of various railway bridges on roads where the Great Western Railway Company is widening the line from OLTON to ROWINGTON.

The SMETHWICK Corporation has prepared schemes for the reconstruction of railway and canal bridges, at a total cost of £74,000.

The SMETHWICH Corporation is to erect thirty-eight houses at Brisbane Road.

The Warwickshire C.C. has voted a provisional estimate of £60,000 for the proposed new bridge over the River Avon at STRATFORD.

NORTHERN COUNTIES

The West Riding Education Committee is erecting a school centre at Woodlands School, ADWICK-LE-STREET, at a cost of £3,256.

The West Riding C.C. is to reconstruct the bridge over the River Aire at BAILDON, at a cost of £22,500.

The West Riding C.C. is to reconstruct BANKFOOT bridge over the River Calder, at a cost of £15,000.

The BIRKENHEAD Education Committee has prepared sketch plans for extensions at the Hemingford Road central school.

The BIRKENHEAD Corporation has asked the Libraries Committee to consider the provision of a branch library in the Preston district.

The Board of Education Committee has approved the plans of the trustees for the erection of a Roman Catholic elementary school, in Challis Street, BIRKENHEAD.

The West Riding Education Committee has decided to erect a senior school for 1,200 children at BOLTON-ON-DEARNE, at a cost of £44,000.

The West Riding C.C. is to widen the bridge over the River Calder at CALDERSIDE, at a cost of £4,500.

The West Riding Education Committee has prepared a revised scheme for the erection of a middle school at CASTLEWOOD, with accommodation for 800 instead of 600 children, at a cost of £26,000.

The West Riding Education Committee is to erect an elementary school for 280 children at FLOCKTON, at an estimated cost of £8,500.

The West Riding Education Committee has prepared a revised scheme for the erection of a senior school at GOOLE, for 1,200 children, at a cost of £42,000.

The West Riding C.C. is to reconstruct the canal bridge at GOOLE, at a cost of £4,000.

The Rotherham Corporation is to sell a site in Wickersley Road, HERRINGTHORPE, to the Vicar of Whiston for the erection of a church and vicarage.

The HULL Corporation Libraries Committee is considering three sites in Cottingham Road, suggested for the erection of a branch library.

The West Riding Education Committee is to enlarge the council school at INGLETON, at a cost of £3,500.

The MANCHESTER city architect estimates that the cost of the erection of the proposed branch library at East Gorton will be £3,000.

The West Riding Education Committee is to erect a new primary school, for 400 pupils, at MEXBOROUGH, the estimated cost being £12,000.

The West Riding Education Committee is to erect a practical instruction centre at Dolcliffe Street school, MEXBOROUGH, at a cost of £5,400.

The West Riding Education Committee is to extend the Adwick Road school, MEXBOROUGH, to accommodate a further 240 scholars, at an estimated cost of £5,000.

The West Riding C.C. is to widen the Knoll Beck Canal bridge in the ROTHERHAM rural district, at a cost of £9,000.

The ROTHERHAM Corporation Markets Committee has approved plans, prepared by the borough engineer, for alterations and extensions at the public slaughterhouses, at a cost of £8,000.

Plans passed by the ROTHERHAM Corporation: House, Broom Lane, for Mr. S. A. Telling; two houses, Old Wortley Road, for Mr. R. Harrington; warehouse and shop, Westgate, for Messrs. S. Waterhouse, Ltd.; wagon repair shop, Fullerton Road, for Wagon Repairs, Ltd.; amended plans, Bridge Inn, for Mappin's Masbro' Old Brewery, Ltd.

The West Riding Education Committee is to erect an elementary school for 500 children at RYHILL, at an estimated cost of £15,000.

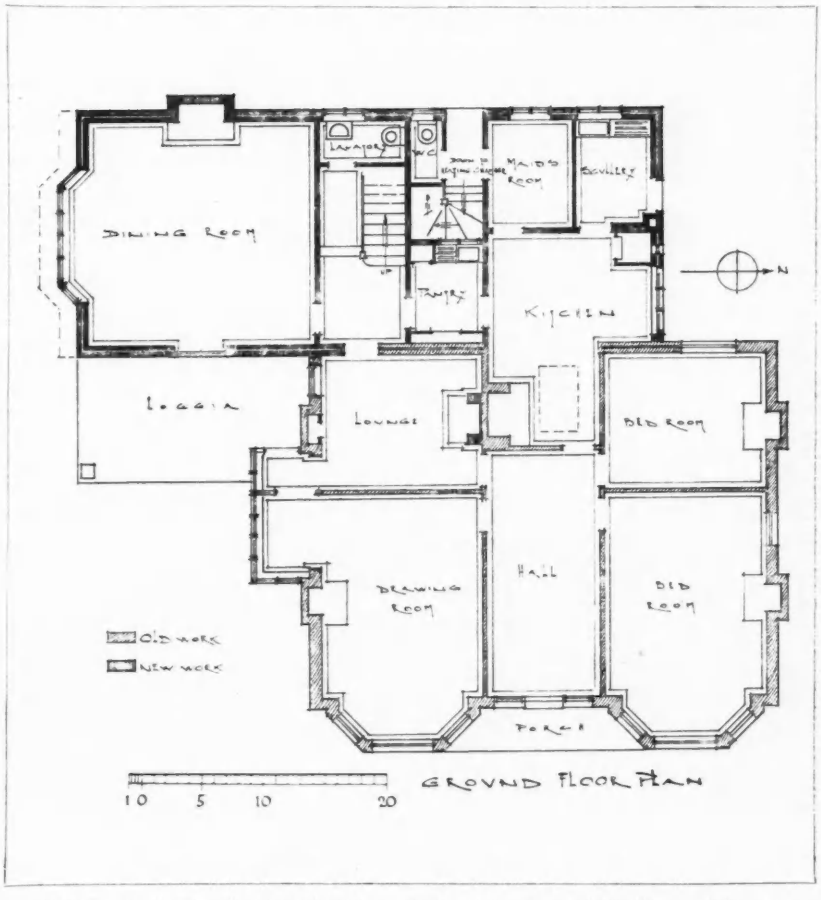
The STRETFORD U.D.C. is to include in the estimates for the year a sum to cover the cost of the erection of an additional 200 houses, and has asked the chairman to continue negotiations for the acquisition of suitable sites.

MISCELLANEOUS

Plans passed by the DOUGLAS (I.O.M.) Corporation: Alterations and additions, "Imperial," Central Promenade, for Miss Cowbourne; six houses, Somerset Road, for Messrs. Creer Bros.; battery room, Royalty Cinema, for the Palace and Derby Castle, Ltd.; alterations, 31 Lancaster Road, for Mr. Cochran; alterations to shop, Little Switzerland, for Miss Brew; alterations, 25 Castle Mona Avenue, for Mr. J. H. Kelly; alterations, 24 Buck's Road, for the Co-operative Society; building, St. George's Street, for Messrs. Crosbie and Cowley.

The ISLE OF WIGHT Education Committee is to extend the Grange Road council school, East Cowes, at a cost of £6,000.

At the last meeting of the WHITEHEAD U.D.C., it was stated that approval had been obtained for a loan of £7,000 for the construction of a swimming pond and shelters for the foreshore.



Additions to "The Knoll," Shiplake. Designed by Leonard V. Hunt. The new portion of the bungalow is two stories high, and comprises, in addition to the accommodation shown on the ground floor plan, three bedrooms, dressing room, hot closet, bathroom and closet, and boxroom, on the upper floor.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1¾
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1¾
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1¾
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5 ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9

CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ⅜ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add per square	18s.	0d.	
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[continued overleaf

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic :			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup..	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup..	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work :			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS :			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY :			
Fixing only (including providing screws) :			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel :			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc. :			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete. 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only :			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass : 4ths in crates :			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* "	0	2	3
DO. *6 ft. sup.* "	0	2	6
DO. *20 ft. sup.* "	0	3	1
DO. *45 ft. sup.* "	0	3	3
DO. *65 ft. sup.* "	0	3	5
DO. *100 ft. sup.* "	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	1
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	3
Asbestos sheeting, $\frac{5}{32}$ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain " diamond " per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, $\frac{3}{32}$ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅝ in.			½ in.			⅜ in.			¼ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	8½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	6½	5	—	8	—	—	—	—	—



DEDICATORY TABLET IN THE ENTRANCE HALL: N.D.F.S. MEMORIAL CONVALESCENT HOME, SKEGNESS, LINCOLNSHIRE

By

W. H. ANSELL

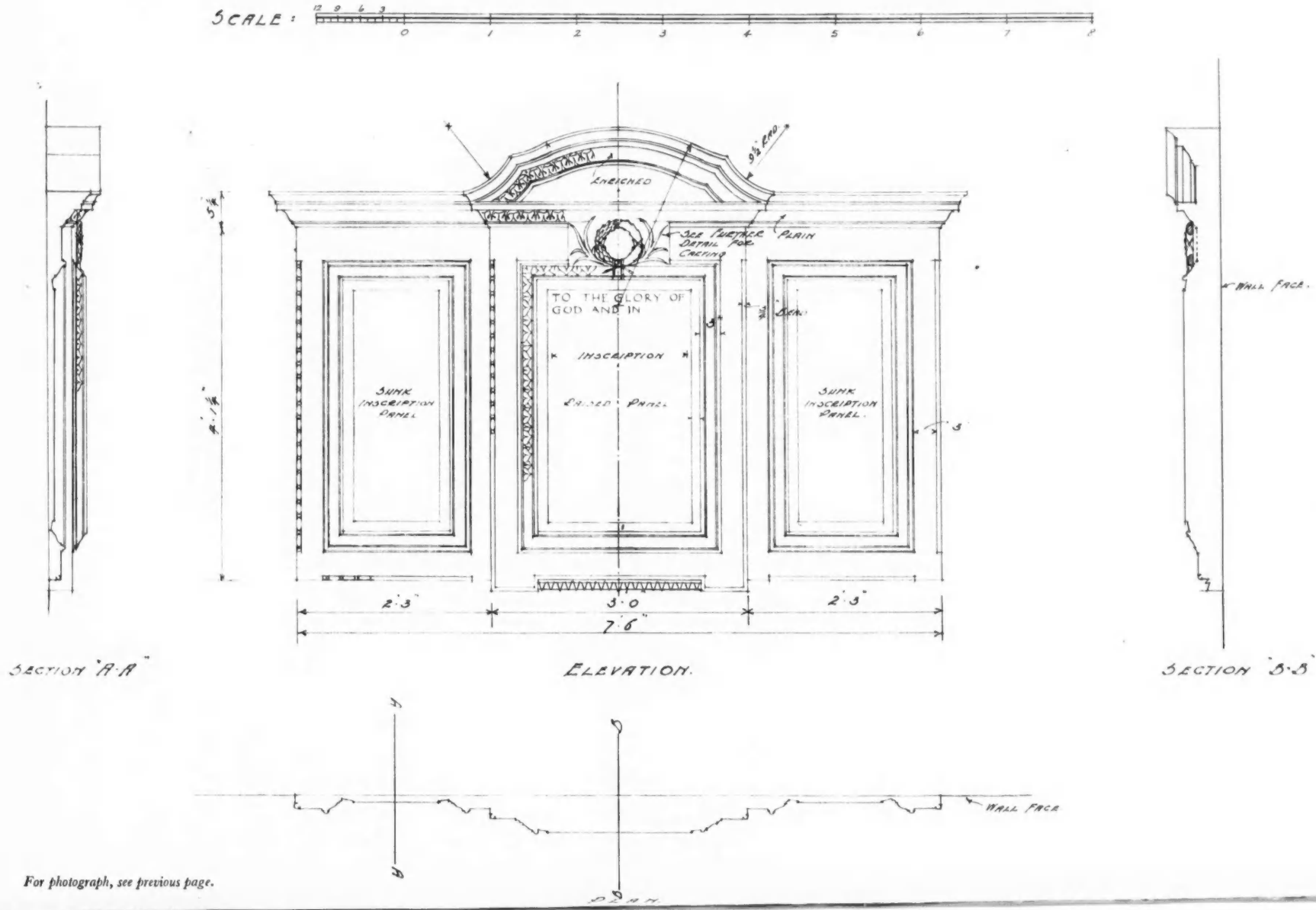
THIS tablet, bearing an inscription dedicating the Home to the memory of members of the National Deposit Friendly Society who fell in the war, has been designed as a commemorative feature in the entrance hall of the Society's Convalescent Home, in Lincolnshire. When newcomers arrive, it is an established custom for them to assemble in front of it for a minute's silence, in remembrance.

Designed by the Architect for the Society, others of whose details at their London headquarters have appeared in these pages, the carving was carried out by Laurence Turner.

The wood is untreated oak, waxed dull, which has now toned to a rich warm colour. The lettering is cut into the wood, which was left unsized and then gilded.

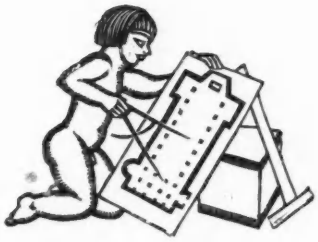
For working drawings, see the following page.

NATIONAL · DEPOSIT · FRIENDLY · SOCIETY · MEMORIAL CONVALESCENT · HOME · SKEGNESS
MEMORIAL TABLET IN ENT. HALL.



For photograph, see previous page.

THE ARCHITECTS' JOURNAL



WEDNESDAY, APRIL 23, 1930

ON THE NATIONALIZATION OF ESTATES

An Alternative to the Bleeding of the Body of England Spiritual

WITH the ink hardly dry upon Mr. Snowden's Budget documents, this is perhaps not a very propitious moment for a dissertation on "death duties and how they may be diverted"; and were we actually concerned in an attempt to frustrate the legitimate rapacity of the Chancellor of the Exchequer we should keep silent until the present storm were past. The subject of our remarks rests rather with the incidence of taxation and concerns the body of England spiritual, as well as financial.

Death duties have played an important part in former Budgets. They are exceedingly heavy and take toll upon the death of each succeeding heir to property, so that it is possible for a family rich in vested property to become impoverished within the passage of a few quick generations, and their estates and lands and all their useful property to be thrown upon the market or left to remain precariously balanced between solvency and bankruptcy.

Weakened by this and by the difficulties peculiar to an unagricultural and competitive world, the class of landowners who have been responsible in the past for the well-being of rural England are placed in the deplorable position of having to sell their possessions in order to pay the taxes on them. One after another, the great estates fall, disintegrate, and become eaten into by a horde of rapacious, mean-minded land developers. The rash of spoliation spreads over all the places which were once lovely, and in our anxiety to save what we may, we, the public, subscribe voluntarily or through our local taxes to buy the best of what is going.

We do not get the best, for we are not rich enough to buy what the public can make no concentrated use of; and rural England, the country of plough and pasture, field and hillside, is open to be violated as the axe of the Exchequer falls, now here, now there.

It has already been suggested that estates bequeathed to the nation should be exempt from death duties as a means of accelerating the flow of land worth keeping into the possession of the public; but this does not touch agricultural land, which, as the Duke of Montrose remarked in a recent article in *Country Life*, constitutes, in the aggregate, rural England.

He suggests, as a means of circumventing the nationalization of land, that the Finance Act of 1909–10 should be extended so that death duties may be paid in land of any description, and that this land should be dealt with by the Government according to its classification. Forest land could be looked after by the Forestry Commission; city land could be used for slum clearance, playing-fields, etc., and might be offered to the local authority on long-term credits; while agricultural land could be put back into farming under leases controlled by town planning regulations.

There would be no question of administration with red tape and officialdom. The change of ownership from private individuals would seek to perpetuate the existing order of things, and it would not be impossible to find the late owner a tenant under the Government, with most of the distresses of ownership behind him, with only a slightly decreased interest in the land, and with greater means at his disposal to make the best use of it.

The Government would naturally find itself responsible for the repair and maintenance of property, and would have to bear the local charges upon land and property; and there would have to be fixity of tenure for the tenant and a fair rent, properly determined.

This is a form of land nationalization, but it is a form that preserves and does not waste an inheritance upon which we daily set a greater value. None of it is pleasant for the landowner, but this method which the Duke of Montrose suggests appears less like dissolution than the saddening breaking-up of fine estates. It should be examined with every care, for even though Mr. Snowden is hard pressed for cash to swell his totals he cannot continue indefinitely to bleed the landowners without ruining their lands, which are our countryside.



RHYTHM IN RECTANGLES: LONDON'S NEW MODERNISTIC CINEMA

A photographic study of the cinema now in course of erection in Vauxhall Bridge Road, S.W., from the designs of Mr. W. E. Trent. The back of the building, in Wilton Road, opposite Victoria Station, is almost similar in design. Seating will be for 2,750. An entrance hall, behind the vertical treatment of the façade and extending the full width of the site, will connect these two thoroughfares with the auditorium. The stalls reach a depth of 20 ft. below the ground and are constructed partly under the pavement. Above will be a huge single balcony. A full stage, with dressing rooms, will be installed.

NEWS & TOPICS

CARDIFF SCHOOL AND THE UNIVERSITY OF WALES

UNDER Mr. W. S. Purchon the Welsh School of Architecture at Cardiff has gradually expanded to the point when, if it is to occupy the centre of architectural education for Wales as a whole, it must seek recognition by the University. It has quite deservedly won a place among the leading schools of the country, and it should now be possible for the young architect in Wales, as elsewhere, to take his training at a University centre. From the standpoint of the University, it would be a step in the humanizing of education to introduce a sense of good building and civic responsibility into its otherwise incomplete curriculum, and the incorporation would be to the good of general education as much as it would further the cause of architecture in a land where architecture is sadly needed.

THE NEW SACKVILLE STREET

What will become one of the completest pieces of rebuilding of contemporary London has been undertaken by the Sutton Trustees, who have commissioned Mr. George J. Skipper, F.R.I.B.A., of Norwich, to re-design Sackville Street in its entirety. This street, which runs from Piccadilly to Vigo Street, and thence into Regent Street, is one of the smaller streets which have benefited by the aggrandizations and popularization of the once very polite Regent Street. It carries no buses and may very well cater for what is known as "exclusive" shopping.

★

It is a little saddening to hear that it is to be in the eighteenth-century manner, fully equipped with columns and pediments; but to set against this there is the knowledge that the narrowness of the street is to be recognized in the reduced height of the façades, and that at a point about midway along the street there is to be a set-back in the frontage, forming a little square with fountains and pools.

★

No better means could be found of safeguarding the value of property than the creation of this gentle amenity. I hope they will prohibit undue advertising display, and control lettering; for the existence of such cultured landowners should be recognized by those who are to benefit.

BATTERSEA'S WREN HOUSE TO GO?

Not many people know of the little nucleus of Early Georgian buildings that cluster round the old church at Battersea. The church stands by the riverside, with its graveyard nearly tumbling into the water, and the pleasantest group of houses spreads about it. A little farther on is a fine old place that, if Wren did not build it, then at least it is so much animated by his quality as to appear the work of the master himself. This house stands in a large garden, behind an old brick wall, and for long has been a college. Now, however, it has been sold to the Borough Council of Battersea, who, it seems, are going to pull it down in order to put tenements upon the site. I am not certain whether this is actually their intention, for it is hard to believe that so fine a piece of work, soundly and beautifully built, straightforward in plan and useful for so many purposes, should be destroyed, when it could so well form part of whatever scheme of rebuilding the council have in mind. It is to be hoped that they will think twice before committing a crime.

WIDENING MEDIEVAL BRIDGES

Many medieval bridges, although of ample strength to carry the weight of modern traffic, are far too narrow for safety, and the question of widening these structures frequently arises. In most cases the ideal course would be to divert the road and build a by-pass bridge a short distance from the old one. So many bridges are built at right angles to the approach road that even when the bridge has been widened these sharp corners are a source of danger. If, however, a by-pass scheme is not possible, and the bridge must be widened, it is interesting to consider the alternative methods which have been used in the past.

★

The illustrations show three different types of procedure. In the case of the bridge over the Avon, at Fordingbridge, in Hampshire, the extra width has been obtained by building



Hele Bridge, over the River Tone, Somerset, a medieval structure lately widened in a manner detrimental to its appearance.

on to the cutwaters in such a way that the new work does not hide or shadow the chamfered arch-rings of the medieval bridge. It is otherwise with Hele Bridge, over the Tone in Somerset, which has been widened by carrying the parapet on iron girders built on the tops of the cutwaters, a method that has completely ruined the appearance of a fine bridge.

★

In both of these cases the amount of widening is comparatively small—about five feet—and should this not be sufficient the plan adopted at Bridford Bridge, over the River Teign in Devon, might well be more often followed. Here the sixteenth-century bridge has been widened, to nearly double its original width, by throwing across the stream a single segmental arch, leaving the middle pier of the bridge unspoilt.

THE SANCTITY OF SEALED DOCUMENTS

It is not very often that a case concerning the sanctity of sealed documents in connection with builders' tenders is before the courts. A recent case in which a co-operative society invited tenders for the erection of a building, and then examined the priced quantities in detail before

accepting one of them, cuts so dead against the traditional veneration for an honourable procedure in the handling of sealed documents that one may be glad to know that such things are of rare occurrence.

★

The priced bill of quantities is sent by the builder in a sealed envelope with his name on it, and, it being assumed that the builders who were asked to tender are reputable firms, the acceptance of one of their tenders is based on the totals and is nearly invariably the lowest



Extra width for the Avon Bridge at Fordingbridge, Hants, has been built on to, without obscuring, the cutwaters.



The widened portion of Bridford Bridge, over the River Teign, Devon, is inoffensively carried on a single span arch.

total. It is, of course, the duty of an architect to see that this procedure is carried out to the letter, since nothing destroys goodwill so easily as an attempt to question the honesty of a builder by taking advantage of his absence to probe into documents which are under seal.

THINK OF THE WINDOW-CLEANER !

There is a little point which, if attended to, would lighten the conscience of many an architect who designs high buildings. I refer to provision for the safety of window-cleaners. These men never seem to use the safety belts which the law orders them to use, and mainly because the law leaves the provision of suitable hooks or rings for hitching the belt on to, to the building owner. In America, where nobody would dare to stand on a sill hundreds of feet above the pavement, such rings are standard equipment. They should be here, of course, for a man who falls backward from the sixth floor is not much better off than the fellow who takes a little longer to fall from the sixtieth floor.

THE COUNTRY CRAFTSMAN'S BUREAU

The annual report of the Rural Industries Bureau shows a remarkable widening of its sphere of usefulness. The Bureau is an organization working under semi-Government auspices to provide an advisory service for country craftsmen. Now, country craftsman may denote nearly anything. It may be, for instance, the particularly futile manufacturer of useless knick-knacks, who is usually a woman; or it may be, on the other hand, the type of useful person whose activities have been temporarily thrown out of gear by a sudden rush of civilization.

★

I was glad to notice that the advisory bureau has concentrated upon the practical side of the business of making useful things well. It has helped the small man to use modern methods of working, and it has helped him with his costing and his accounts, which anyone who has had to do with village craftsmen, blacksmiths and the like, will recognize as one of their real stumbling-blocks. It is natural that the bulk of the work has had to be done by post and through the medium of pamphlets, charts, working drawings and the like. This is a drawback, but, when compared with the lack of all encouragement formally obtaining, it constitutes a very real advance, for encouragement sets a man to work and gives him the wish to make things. He needs but guidance and a certain public for his goods and he will learn to make them well.

★

There can be no doubt that the existence of a class of independent country workmen, maintaining a tradition and turning new furrows, is something that we cannot do without, and as architects we may perhaps help more than others in furthering the spirit of new health which the regeneration of rural industries will foster.

ASTRAGAL

TODAY : OPENING DAY

Today is the opening day of *THE SKETCH CLUB*. What is this *SKETCH CLUB* ? It is a place where sketchers meet, architectural sketchers of every sort and in every colour, to show their work. Whether they sketch for profit or for pleasure does not matter either. Once a fortnight their sketches are displayed in THE ARCHITECTS' JOURNAL. Today they may be seen for the first time. Admission is by way of pages 650 and 651.

The Editor of THE ARCHITECTS' JOURNAL submits *THE SKETCH CLUB* to the notice of all those readers who own to a partiality for sketching. He hopes one day to reach the secret sketchers too, but those who indulge openly and pursue their hobby in public places must, he feels, set an example to the others. They are cordially invited to show their work in the ensuing exhibitions. Sketches should be addressed to the Editor, THE ARCHITECTS' JOURNAL, 9 Queen Anne's Gate, S.W.1.



The main entrance, from Regent Street. The doors and lamps are bronze; the pilasters of black Belgian marble, with bronze caps and bases.



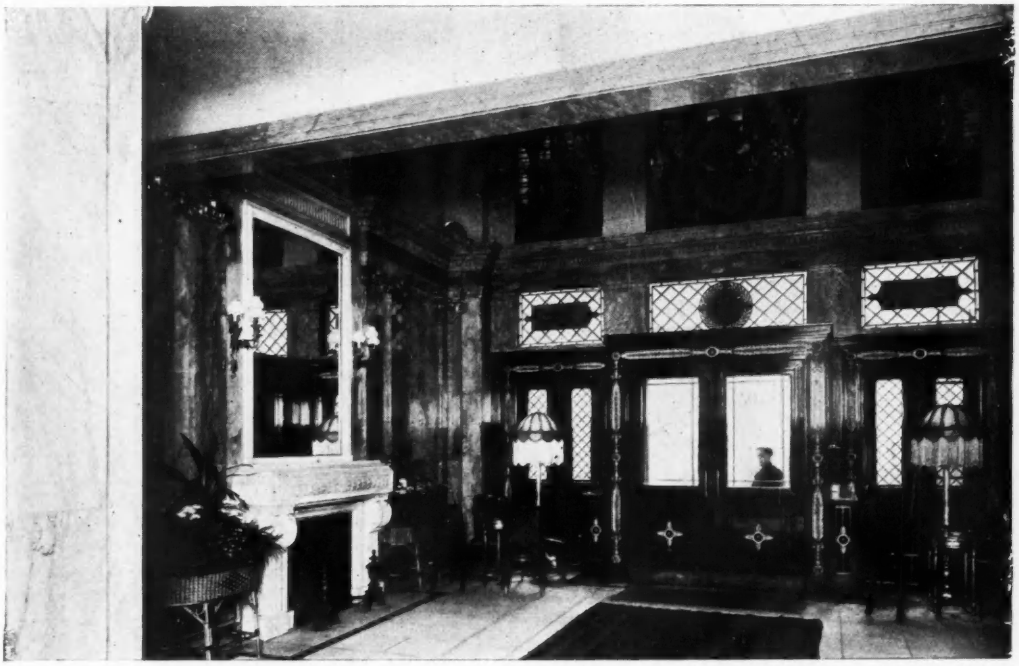
The entrance hall, looking from the main entrance doors. It is lined with marble, and contains two monumental fireplaces and two fountains similar to those shown.

THE CAFÉ ROYAL, REGENT STREET, W.

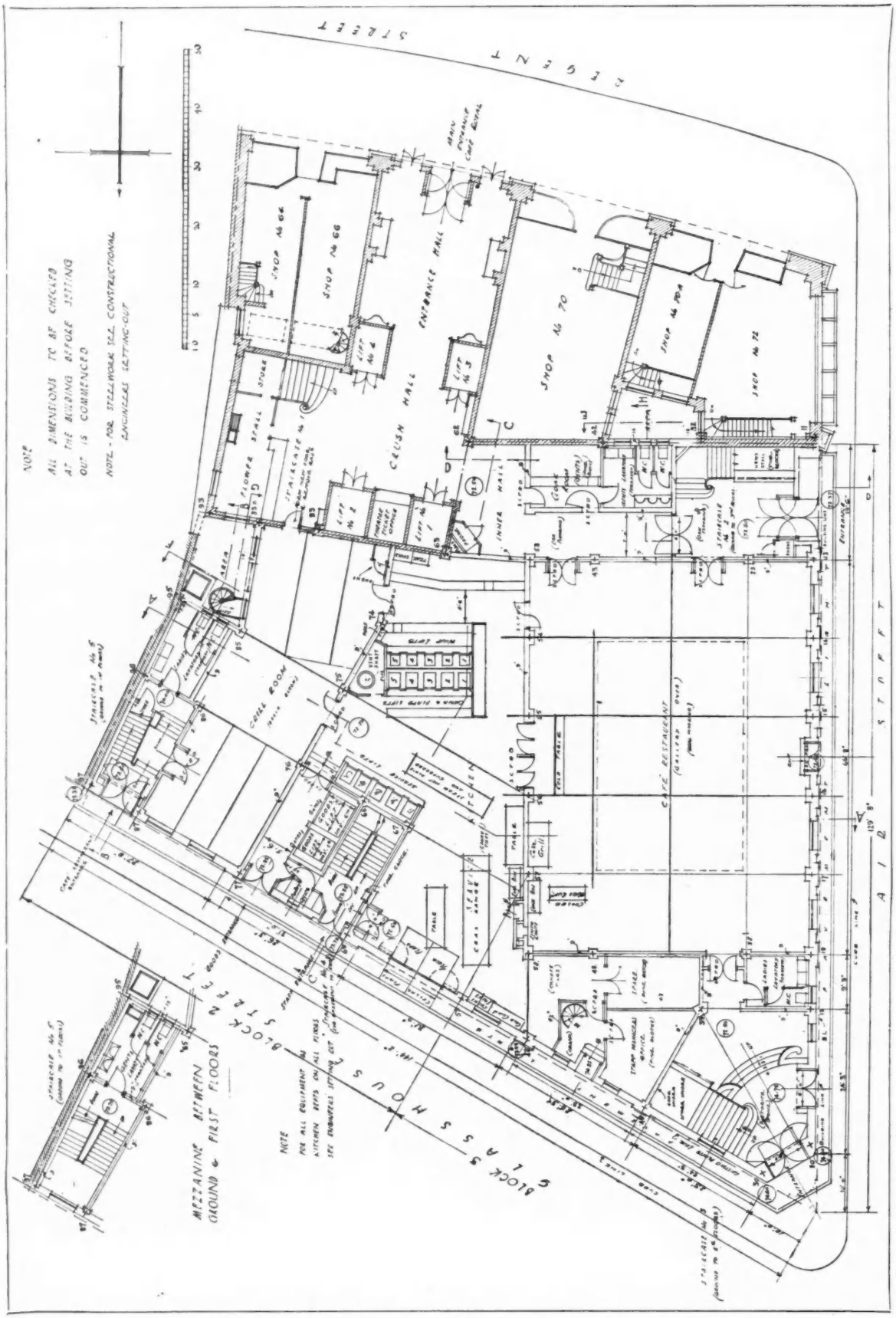
DESIGNED BY MESSRS. HENRY TANNER

THE Café Royal stands on a three-sided site, bounded by Regent Street, Air Street and Glasshouse Street. It comprises basement and sub-basement, and eight floors above. On the Regent Street front the building is faced with Portland stone, and on the other fronts with cast stone.

The main entrance is from Regent Street, and leads into a vestibule designed in the French manner. Immediately inside the door is a lofty entrance hall, lined with marble and containing two monumental fireplaces



The entrance hall, looking towards the main entrance. On the ceiling is an original painting from the old building. The doors are mahogany. Above the leaded windows are three stained glass windows.



Café Royal, Regent Street, W. [*By Messrs. Henry Tanner.*

Outstanding features on the ground floor are the café restaurant and the grill room. A view of the former, which extends through two floors, appears on page 641. The grill room is refitted with all the original wall and ceiling decorations from the old café. Building was carried out in three sections, spread over a period of five years.

and two small fountains. Adjacent is the crush hall, containing the staircase and lifts. This hall is even more French and dignified than the entrance hall, and is particularly notable for the reason that a square stair plan has been adopted by the architects instead of the traditional Gallic spiral. The stair has a fine black iron and gilt balustrade.

has a gallery. They can be used for banquets or as ballrooms. The largest is the Napoleon. This can be divided into two apartments by steel shutters dropping from the ceiling, and can be used, if necessary, in conjunction with the adjoining Empire Room, for public and other functions.

In some of the apartments are original

predominate. A more modern Continental feeling has been introduced in the Napoleon Room, and a new note struck in the details of the fittings generally, particularly the ornamental ironwork.

The Café Royal was founded in a small way by Daniel Nicol, a Burgundian and wine merchant of Paris,



Café Royal, Regent Street, W.] [*By Messrs. Henry Tanner.*

The Glasshouse Street (left) and the Air Street façades are of cast stone. The entrance doors at the corner are of mahogany with a grey granite surround. Steel casements are fitted.

Under the soffit of the staircase is a flower stall with a marble counter and wrought-iron trellis work.

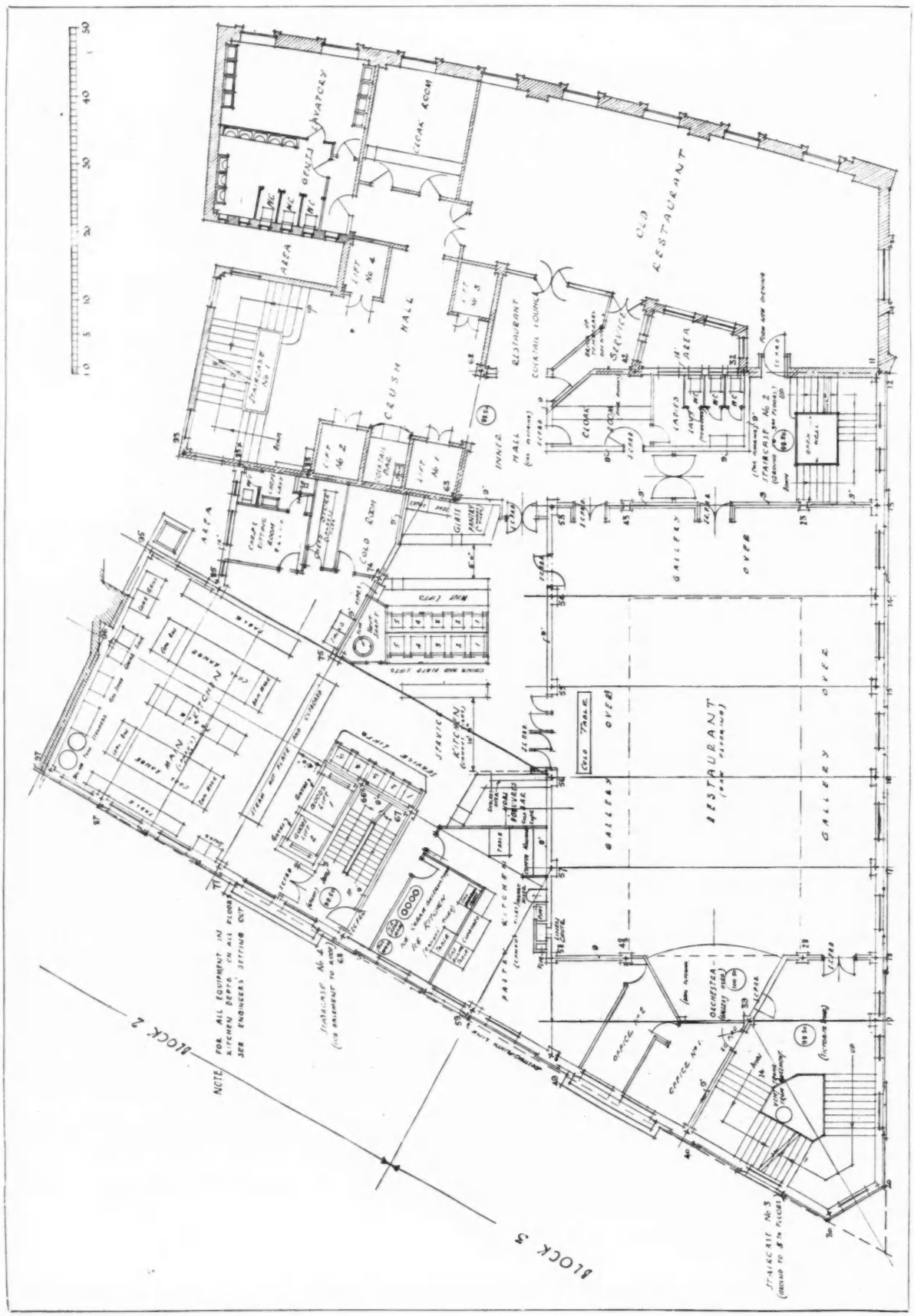
Four high-speed lifts connect the various upper floors containing, among other apartments, the Marie Antoinette, the Josephine and other banqueting rooms, and the Masonic temples. The Napoleon and Louis XVI Rooms extend through two floors, and each

painted ceilings and tapestries re-used from the old building, and on the ground floor the grill room has been refitted with all the ceiling and wall decorations from the old café.

The banqueting rooms and restaurants gave the architects ample scope for variety of decorative treatment, a treatment in which the French designs of the Napoleonic and Empire periods

and his wife, both of whom had come to this country in the 'sixties.

At once it became the resort of French refugees and Huguenots, and later the rendezvous of outstanding personalities in literature, music, art and sport. Here might have been seen together Rossini, Garibaldi, Paderewski, Whistler, Wilde, Aubrey Beardsley and John Ruskin.



Café Royal, Regent Street, W. [*By Messrs. Henry Tanner.*

On the second floor are the restaurant, with its gallery on the floor above, and what is known as the old restaurant (for photograph, see page 642). All the kitchens and grill and service rooms are planned on the Glasshouse Street front, shown on the left of this drawing. Room has been found, above the central area, for a chef's suite.



The main staircase has a black wrought iron and gilt balustrade. On the left are seen lift-gates, similarly treated. Beneath the stair is a flower shop with a marble counter and fine trelliswork.



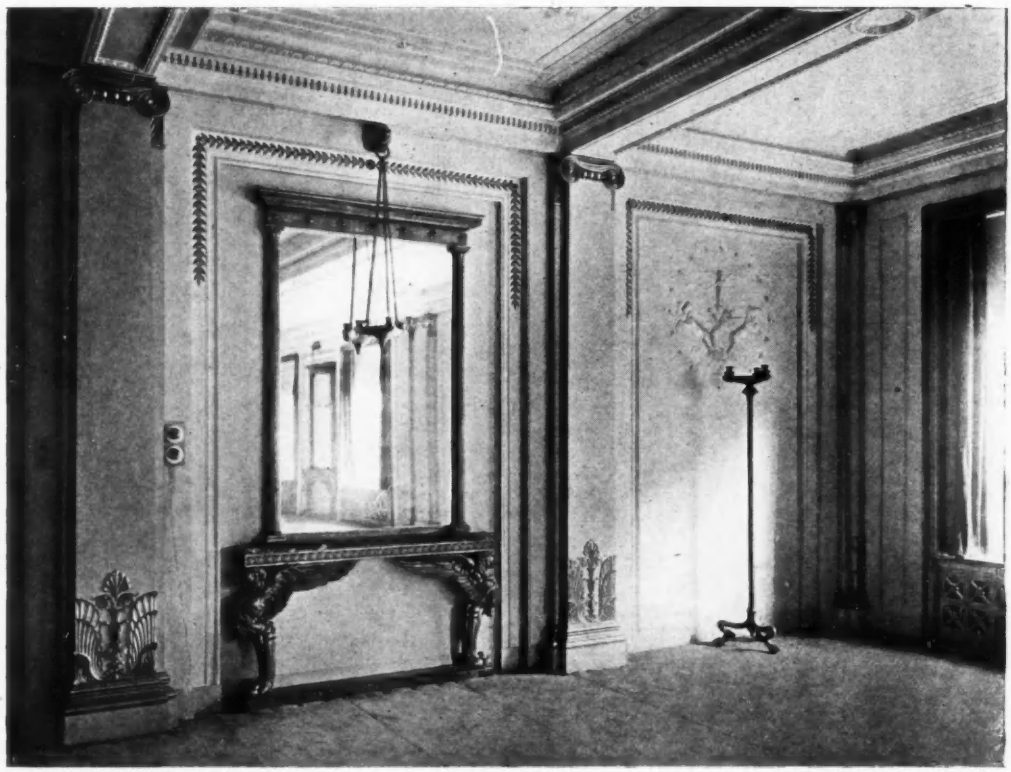
Café Royal, Regent Street, W. [*By Messrs. Henry Tanner.*

The gallery above the café restaurant. Both are decorated in striking colours, in which red seems to predominate. The electric light fittings in the ceiling and on the gallery balustrade are particularly effective.

C



This is known as the old restaurant, for the reason that some of the materials from the original building have been re-used in its construction, such as the paintings on the ceiling.

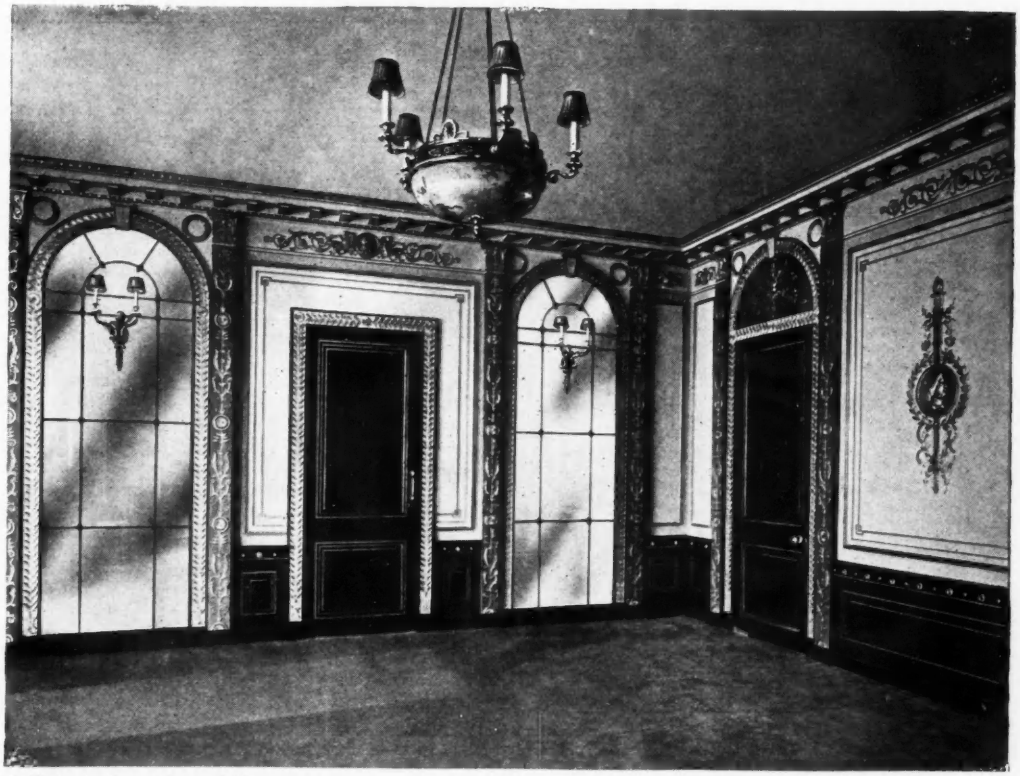


Café Royal, Regent Street, W. [*By Messrs. Henry Tanner.*

In the Empire Hall the walls and ceiling are yellow parchment colour, picked out in gold. The panels on the ceiling beams themselves are of a full green tone.

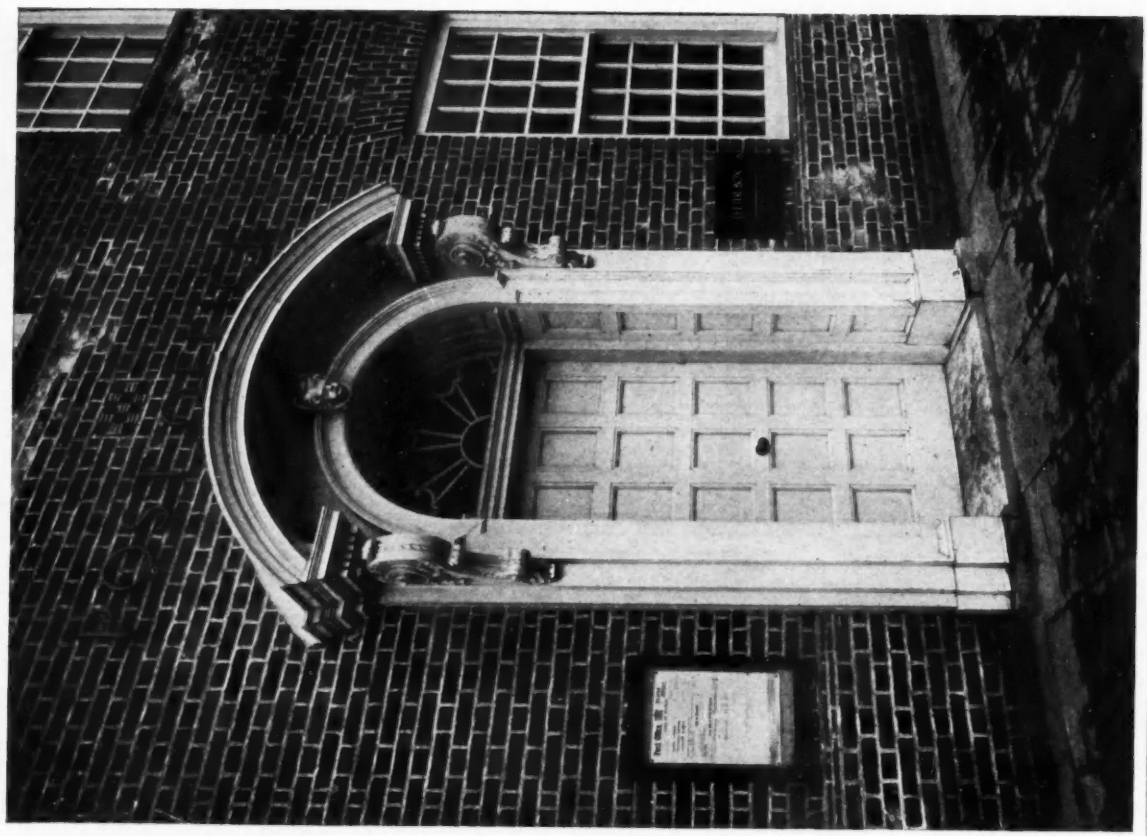


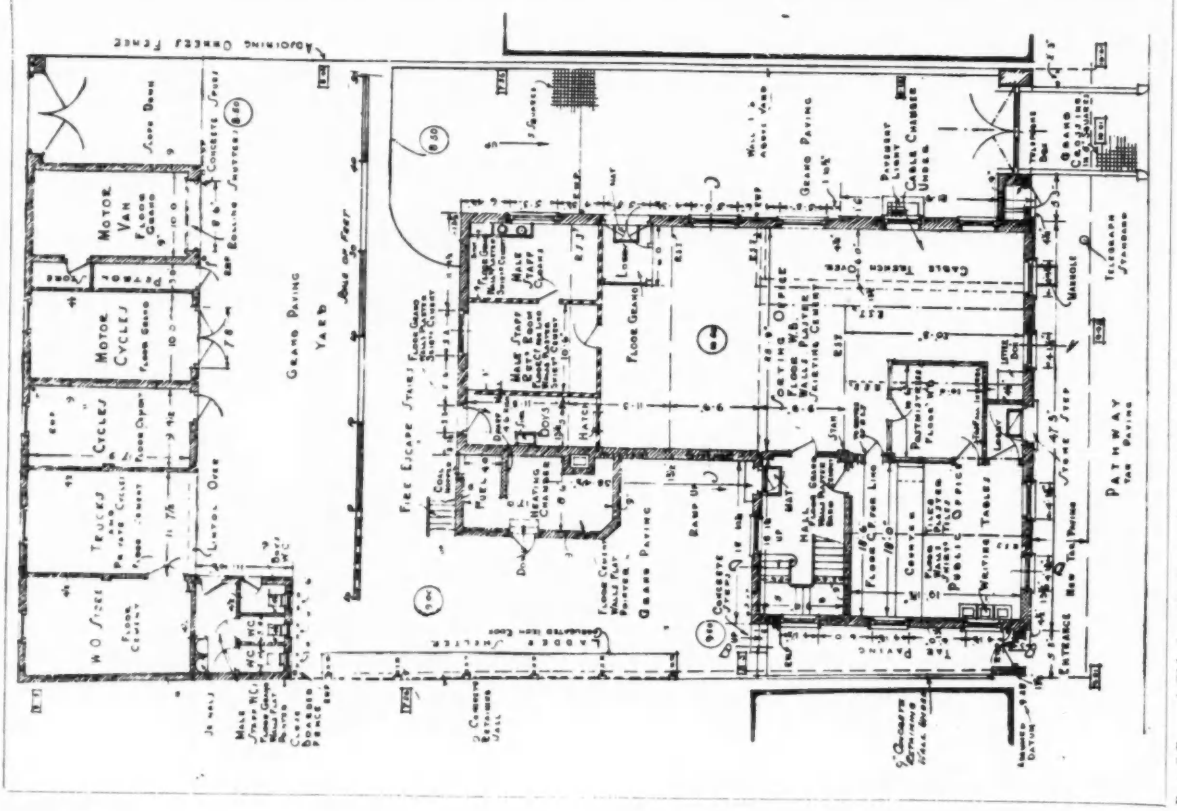
The Napoleon room is the largest in the building. It is two floors high, and can be divided by steel shutters, which drop from the ceiling. Decorative colours include yellow parchment, green, amber and red.



Café Royal, Regent Street, W. [*By Messrs. Henry Tanner.*

The club room, like much of the other decoration, is in the Empire style, after the manner of Percier Fontaine. It has parchment coloured walls, red pilasters, and blue semi-circular door heads, all picked out in gold.





Post Office and Telephone Exchange, Egham, Surrey. [*By A. Balloch, H.M. Office of Works.*

The ground-floor plan, and a photograph of the main entrance. The ground floor is used solely for postal purposes and comprises the public office, sorting office and retiring rooms for the male staff. On the first and second floors are the telephone exchange and welfare accommodation for the operating staff. The main entrance has a wooden doorway with carved hood brackets.

TWO MODERN POST OFFICE BUILDINGS

Egham : A. BULLOCH *ARCHITECTS* A. SCOTT : Mitcham



Post Office and Telephone Exchange, Egham, Surrey.] [*By A. Bulloch, H.M. Office of Works.*

The main front to Station Road. The principal elevations are faced with multicoloured, hand-made bricks, and the roof is covered with red sand-faced tiles.

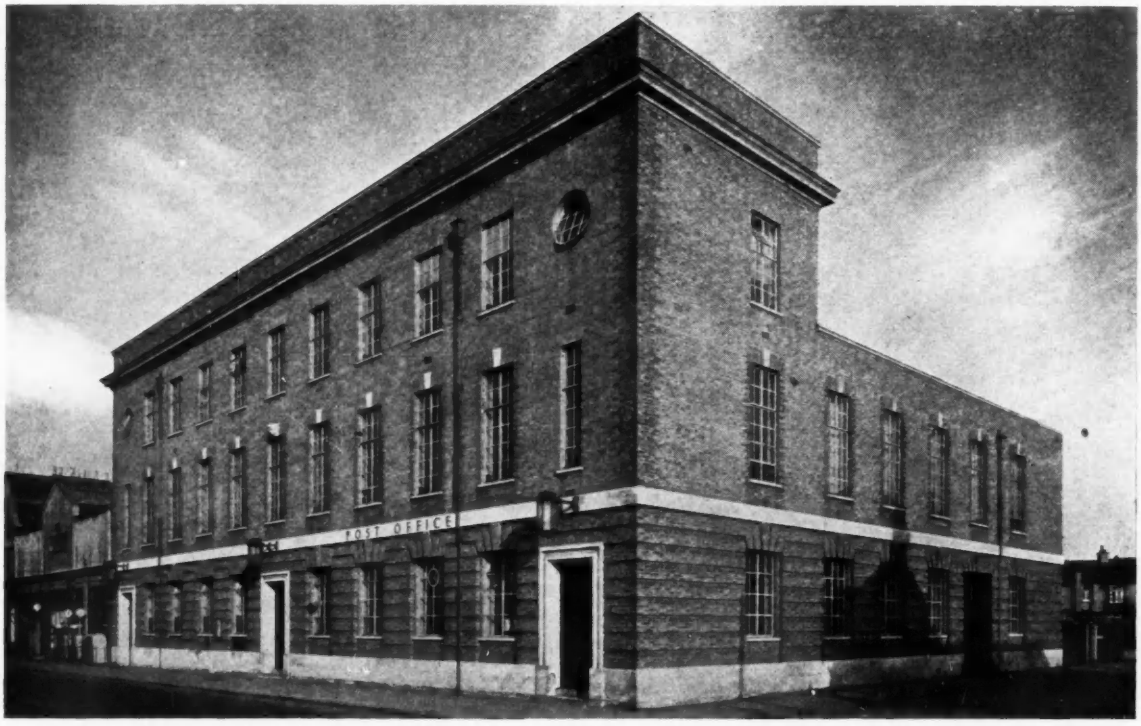
(Plans reproduced by permission of H.M. Office of Works and the Controller of H.M. Stationery Office.)

THESE two buildings, in each case comprising a post office and telephone exchange, were designed by architects of H.M. Office of Works. That at Egham stands in Station Road, adjacent to the railway station; and that at Mitcham occupies a corner site, with frontages to London Road and Elmwood Road.

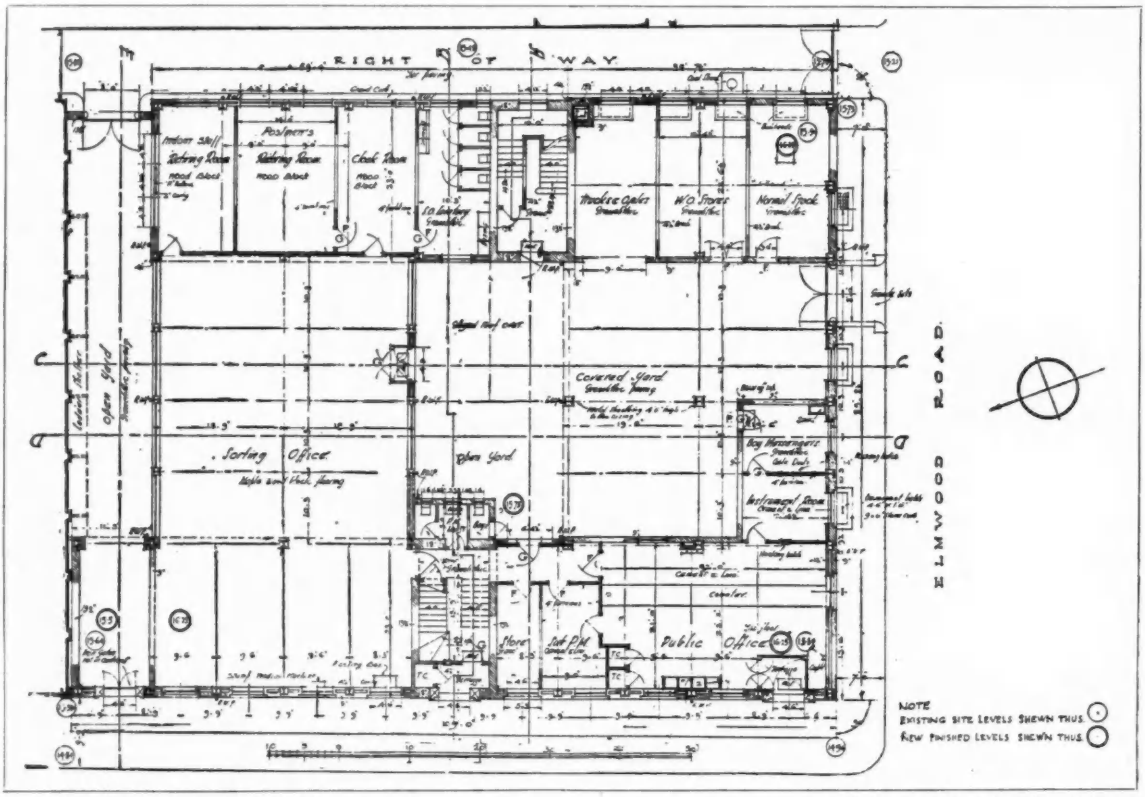
Each building is three stories high, and is planned with the public and sorting offices on the ground floor, and the telephone exchange on the upper floors.

On the ground floor at Egham, in addition to the public and sorting offices, are the postmistress's room and retiring room and "cloaks" for the male staff. Beyond the yard are outhouses for motor van and cycles, ordinary cycles, and stores. On the first floor are the apparatus room, battery and workmen's rooms, and retiring and cloak rooms for the women: on the second floor are the switch and night operators' rooms, and a spacious asphalt roof, upon which is an apparatus entrance to the switch room.

At Mitcham the building provides accommodation of a similar nature but in a more pretentious manner. The site is larger, and more space is devoted to the main working departments. Both buildings are situated in Surrey, and are erected in brick. An interesting feature at Egham is the installation of a clock on the right-hand side of the façade at first-floor level.



A view of the London Road (left) and Elmwood Road façades. The elevations are of purple bricks from the base to the string-course, and above of picked stocks. The three doorways on the main front, the cornice, stringcourse and base are of Portland stone.



Post Office and Telephone Exchange, Mitcham, Surrey.] [*By A. Scott, late of H.M. Office of Works.*

On the ground floor are the public and sorting offices, and a covered yard and stores for the use of the telephone exchange, which occupies the first and second floors. The building is designed to carry a further story in the roof.



ENGLISH PRECEDENT No. 112

IRONWORK IN GREAT ORMOND ST., LONDON, W.C.1.

The ironwork of this house is unusually complete, as not only are the lamp holders and link extinguishers in position, but a gate still shuts off immediate access to the front door.

The ironwork is typically English, made from square and rectangular section bar, and of a weight seldom varied over the period. The remarkable point about it, however, is its harmonious blending with the other decorative work, in this case with the carved consoles and frieze over the door. Such unity of conception and decoration is the mark of a culminating period. It is beginning to be found again in the best modern work.

—[E. MAXWELL FRY.]

[*This illustration was one of many shown by Mr. W. A. Clark, F.R.P.S., in a lecture on "A London Pilgrimage," given at a recent meeting of the Royal Photographic Society, and is reproduced by his kind permission.*]

THE RURAL BRIDGE IN SOMERSET AND DORSET



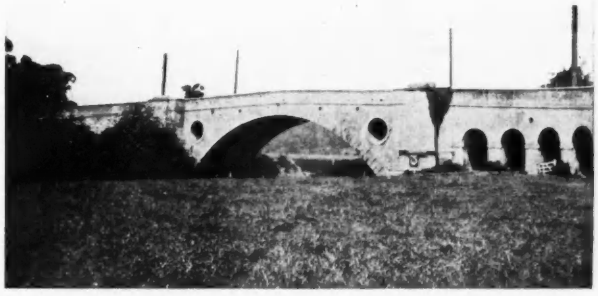
Load Bridge, over the River Ivel, a few miles from Ilchester.



The bridge at Higher Wood, a quaint design in brick and stone.



Grey's Bridge, Dorchester, over the River Frome, built in stone in 1748.



Four miles from Bath, New Bridge, Corston, carries a tram road over the Avon.



Woolard Bridge spans the River Chew, a Somersetshire tributary of the Avon.



Cornford Bridge, near Sherborne, in Dorset, crosses the Caundle Brook.

Astragal has some notes, in this issue, on methods of widening medieval bridges.



A Quayside House, the Sound, Plymouth, Devon.
By E. B. Musman.

IN our seaside towns, with their medley of Victorian bay windows and twentieth-century dolls' houses, the interest of the visitor is often held by relics of older days. Small, unpretentious little dwellings, beautified by the passing of years, holding priceless historical secrets within their storm-swept walls, stir the imagination, and freshen the memory, of the passer-by. Stories of boyhood, buried treasure, pirates, windjammers, deep seas, storms and visions of the remote corners of the earth come rushing back.

Such little houses as those illustrated, one in Deal and the other in Plymouth, both in the most exposed and bleak positions, express an unqualified allegiance to the sea. The house at Plymouth looks out over the Sound, where the preparations were made to meet the threatened invasion by the Armada, and where, as tablets affixed on the adjoining quayside inform one, the embarkation of the Pilgrim Fathers on their perilous journey took place, and, in these later days, one of the first west and east transatlantic aeroplanes landed.

One must surely go back to the days when the artisan was the artist, when dwelling-houses were not the result of unimaginative use of tee and set squares, but were an expression of the life, work and environment of our fore-fathers, for the true, unspoiled character of our seaside towns.

E. B. M.



A Corner in Wiltshire.
By J. D. M. Harvey.

THE SKETCH CLUB

FEW sketchers work consistently in one medium. Many a masterpiece in the genre has been done in burnt match-stick on a marble-topped table, and, dusted away within the hour, has thereby been lost to posterity. Even in turning the leaves of the more permanent sketch-book, it is the diversity of means that is intriguing. It is fitting, then, that several of them should be exhibited here. The two seaside houses are small water-colours; the delicious corner in Wiltshire is in red crayon, while another couple of impressions from the same hand are in pencil; the study at Bordeaux shows sepia pen-and-ink work, with a sepia wash over all.

A sketch, however, is nothing if it does not tell its own tale; and as there is here, too, a background of marginal notes, the showman has no more to do than to declare open this

First Session



A Little Seaside House at Deal, Kent.
By E. B. Musman.

the accustomed treatment of the Bordeaux

positions, express an unqualified allegiance to the sea. The

First Session

fathers, for the true, unspoiled character of our seaside towns.

E. B. M.

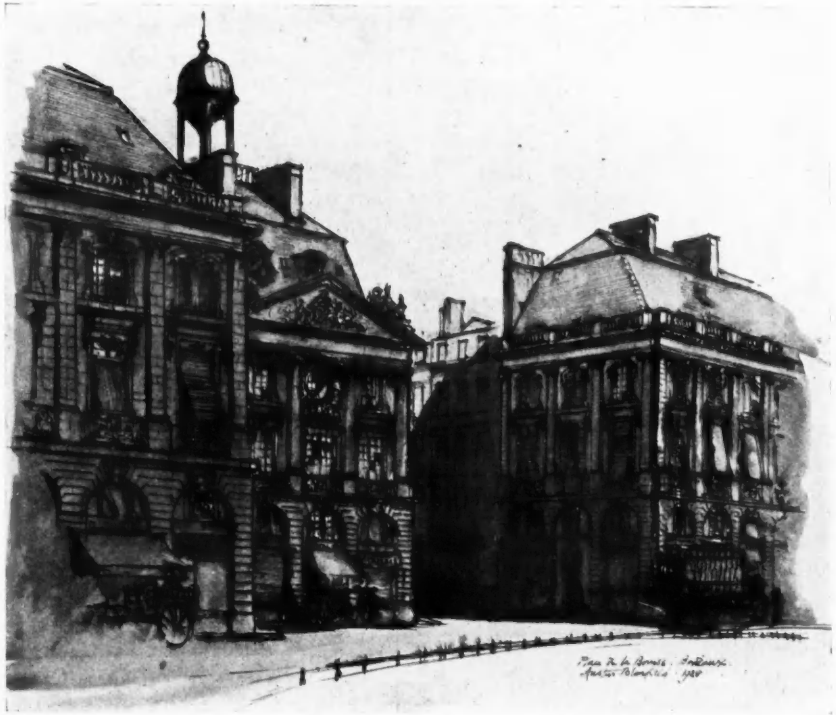
SOME cities will recall at a glance their distant histories and their medieval greatness. Bourges has not changed since the time of Jacques Cœur; Sémur, with its little crooked ways, could still be the home of ambushments, onfalls, sallies, and camisadoes. But of Bordeaux, the capital of the Black Prince, and of those times "when all the great lords of England and Gascony were within its walls, and each would have his trumpeter to blow as loud as his neighbour, lest it might be thought his dignity had been abated," there remain but a single tower, the fragments of its abbey, and its churches.

In effect, it is a town of commonsense planning and eighteenth-century comfort. There are none of the byways, ruelles, the impasses of a medieval town, but an array of imposing streets, well-planted boulevards, and an ordered cleanliness. There are many churches, but they do not catch the eye, nor is any one—as is the Cathedral at Amiens—the focus of the town.

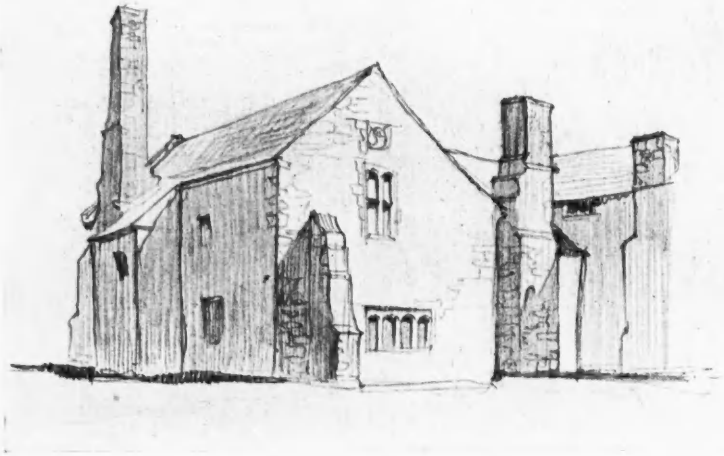
The quays, where are the great wine-merchants' stores and the true wealth of the town, culminate in the Place de la Bourse, of its kind as good a piece of architecture as is to be found in France. It was begun in 1738, from Gabriel's design, and finished in 1755. The actual detail follows the accustomed treatment of the Bordeaux façades and, though extremely good, is in the regulation manner, but it is uncommonly impressive in its mass and scale. The buildings form three sides of a rectangle with canted inner angles; the centre block, thrown right back to allow of two streets entering, is treated with a pediment and cupola which repeats on either side; and the fourth side is formed by the embankment and river. It is placed at a part of the quay lying on a very flat curve, and forms the centre of an arc more than a mile long, and the gradual sweep to this great centrepiece, with the relief of the water and the shipping, form a most impressive composition.

It is the ordered seemliness of its streets and buildings that gives Bordeaux its place among cities famous for their architecture. Lovers of the picturesque and the medieval will be disappointed. Here are no fantastic skylines, no brave confusion of roofs' gables, broken skylines nor cobbled streets, but something of far greater value—method, dignity and restraint, the "ordonnance" of building beloved of the great French architects. And it is these that teach the lesson not lightly to be forgotten by the true lover of architecture.

A.B.



Place de la Bourse, Bordeaux, France.
By Austin Blomfield.



A Farmhouse a Cothay, Wilts.
By J. D. M. Harvey.



Stone Cottages at Corfe, Dorset.
By J. D. M. Harvey.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

The Scottish Housing Bill

THE Scottish Housing Bill, resembling in its main features the Housing Bill or England and Wales, has received a second reading in the House of Commons unopposed. The feature of the discussion was the speech of the Secretary of State for Scotland, describing the depressing housing conditions in the country for which he is the responsible Minister. He drew a picture of the conditions which prevailed when the Royal Commission on Scottish Housing made a memorable report in 1919, revealing a distressing tate of affairs in many parts of the country. In a general way it showed unsatisfactory sites of houses and villages, insufficient supplies of water, unsatisfactory provision for drainage, inadequate provision for the removal of refuse, widespread absence of decent sanitary conveniences, houses in many of the mining areas badly constructed, incurably damp labourers' cottages on farms, whole townships unfit for human occupation in the crofting counties and the islands, primitive and casual provision for many of the seasonal workers. The Royal Commission did not deal in broad generalities; they came down to actual figures of houses needed. Briefly, the Commission recommended that there were required in Scotland no fewer than 121,430 houses to meet the needs of the people, based on the standard of housing in general acceptance in 1917. But the Commission were not satisfied with the standard of housing accepted at that time, and they were strengthened in that opinion by a reference to the census figures, which showed that half the houses in Scotland were of one and two rooms only. Accordingly, the Commission recommended the raising of the standard, and to raise the standard of housing an additional 114,560 houses were required—a total of 235,990 houses—before Scotland could be regarded as adequately housed. Each Government since the issue of the Commission's report in 1917 has made its contribution to the solution of that problem, and altogether to February 28 last, the latest date for which returns were available, there had been provided under all forms of State assistance by local authorities and private enterprise a total of 107,451 houses.

As it was estimated that 10,000 houses were required annually in Scotland to meet the normal needs and to provide for the new yearly demands, it would be realized that since 1919, when the first scheme of Government assistance was passed by Parliament, building operations have on average only just kept pace with the normal needs of the Scottish people. All who had given consideration to the subject were convinced that, however commendable the efforts of local authorities up to date had been, the houses built had not to any extent solved the problem of the slums or of the housing of the poorer section of the community. That section of the community comprised those whose economic position prevents them from paying the rent which was charged for the greater number of houses which had already been built. Some steps, however, had already been taken in that direction with the aid of the 50 per cent. grant made available under the 1923 Act, and 11,205 houses had been built at low rents specifically to take the place of houses that were occupied but were unfit for occupation.

Major Elliott, speaking for the Opposition in the Commons, said they intended to give the Government the Bill without a division. The Government had the responsibility—a grave and tremendous responsibility—for the housing of the people of Scotland. They had taken a considerable time to bring forward their proposals, and their responsibility was therefore all the greater.

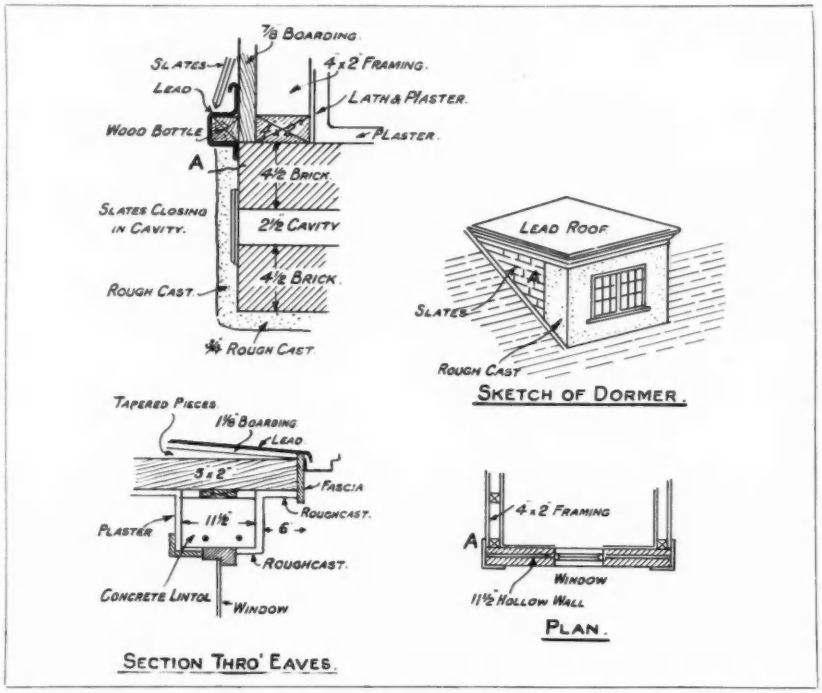
The Haig Statue

Mr. Lansbury, the First Commissioner of Works, answered a question with regard to the Haig memorial statue, the first model of which, it will be recalled, evoked much criticism from many quarters. When he last made a statement with reference to the statue (in November) the expenditure that had been incurred was £450, but an instalment of £100 is about to be paid to the sculptor towards the sum of £500 which it was agreed should be paid for the new and larger model. He pointed out that it was not possible to name any date for the completion of the statue, but the work on the new model was expected to occupy at least six months from the present time.

Hadrian's Wall

There have been strong expressions of indignation in the House of Commons at the news that a quarrying company proposes to quarry in the area of Hadrian's Wall in Northumberland. These operations, if they proceed, will change the countryside, it is said, in such a way that the Wall will be wholly changed in appearance, and the value of a famous monument of ancient Rome greatly depreciated. The difficulty in the situation, from the point of view of the Office of Works, appears to be that there is not sufficient power under the Ancient Monuments Act to protect the Wall.

It was announced in the House of Commons, in reply to members who used strong expressions about the proposed quarrying enterprise, that Mr. Lansbury, the First Commissioner of Works, will pay a personal visit to the Wall. His Department, it was also stated, are deeply concerned about the proposed operations.



S. E. M. writes: "*Can you inform me as to the detail of a windskew at the junction of slates and roughcast, as shown in the accompanying illustration? I have sketched out a detail which I do not think is quite satisfactory, as the roughcast is liable to crack, as shown at A, thereby admitting dampness.*"

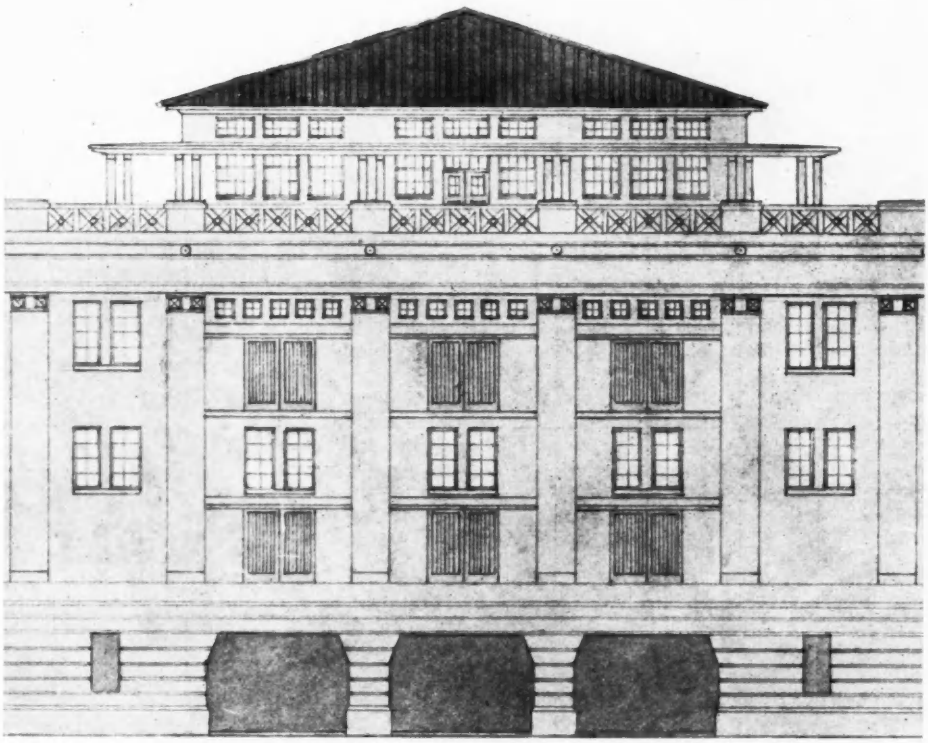
[The Editor invites readers to reply to the above query.]

PROPOSED EXPORT WAREHOUSES AT ACCRA, GOLD COAST

H. B. CRESWELL, F.R.I.B.A., *Architect*



The warehouses, of which there are five separate units, are for the storage of cocoa preparatory to shipment. This is the elevation to the road at the back, from which the cocoa bags are transferred to the warehouses. This road is at the top of a low cliff against which the building abuts. Each warehouse has two floors, and the cocoa is delivered to the upper floor, where it is distributed by moving belt-conveyors running from back to front of the building, opposite each door, or by shoots to the lower floor, where it is distributed by similar conveyors. The small doors give access to stairs leading to office blocks on the roof.



This is an elevation of one unit of the building, facing the beach. The loading into ships is by beach-boats. The open basement is for storage of boats and gear. The bagged cocoa is conveyed to the water's edge by transporters, served by the band-conveyors, bringing the bags to each of the three doors on each of the two floors. The office building in which the business of the warehouse is conducted is arranged on the concrete roof. The walling materials throughout are concrete blocks; the floors and stanchions are of armoured concrete. The "ashlaring" is finished by facing the mould with an aggregate of fine chippings and washing and brushing the exposed surface while green.



This is the elevation towards the beach. The tower comprises quarters for signalmen, and signal mast and lantern (here only partially indicated, on right) for keeping ships informed of the state of the fairway, etc., by day and night. The building was part of a scheme for the development of Accra as a port, but engineering difficulties in building the necessary breakwater to shelter the embarkation beaches has led to the whole scheme being abandoned. The building was designed in collaboration with C. W. Pettit, M.I.M.E., M.I.Struct.E., the then Director of Public Works, Gold Coast Colony. These drawings are by Oliver Law, A.R.I.B.A.

LAW REPORTS

PUBLIC HEALTH ACT : IS DAMPNESS A NUISANCE ? COURT DECISION

Harbottle v. *Singleton. King's Bench Division. Before the Lord Chief Justice and Justices Swift and Branson.*

THIS appeal raised an interesting point under the Public Health Act, viz. whether dampness in a building constitutes an offence in law under the Act.

The matter came before the Court by way of appeal by Mr. Harbottle, as Town Clerk of Blackpool, from a refusal of the Justices of Blackpool to convict Mr. R. K. Singleton, who was the owner of No. 200 Promenade, Blackpool, of an offence against the Public Health Act.

Mr. Jolly, K.C., for the appellant, stated the facts of the case and said it appeared that there was a hole in the roof of the premises in question, and the rain percolated through the party wall into some of the rooms and ceilings of the adjoining premises, No. 202 Promenade. The result was that dampness of an extensive nature appeared on the walls and ceilings, and there were complaints of a nuisance. As the respondent failed to abate the nuisance, proceedings were taken by the Corporation, but the Justices dismissed the complaint, without calling upon the respondent. At the hearing before the Justices, the respondent argued that the evidence tendered by the Corporation did not disclose a nuisance in law, or that there had been any substantial damage, or that the health of anybody had been affected. The case put forward by the Corporation was that the evidence disclosed a nuisance and that it was not necessary to prove extensive damage or injury to health to establish the complaint. The Justices did not accept the Corporation's submissions, which counsel contended were good in law.

The Lord Chief Justice : Can you produce any general proposition of law that any degree of dampness is evidence of nuisance ?

Mr. Jolly said that here the evidence was that there was substantial dampness, and it was sufficient to show that there was interference with personal comfort and the possibility of health being affected to establish a complaint as to nuisance.

The appeal was dismissed with costs.

The Lord Chief Justice, in giving judgment, said the case was a plain one. Here the Justices had come to the conclusion on the evidence of the appellants that the respondent was entitled to succeed, being of opinion that on the facts proved or admitted no substantial nuisance existed, nor was there any evidence that there existed any injury to health. That matter was essentially a question of fact, and the Justices were perfectly entitled to come to the conclusion they had. The appeal would therefore be dismissed with costs.

Justices Swift and Branson concurred.

RIGHT TO SUB-LET : IMPORTANT POINT

Thorpeness, Ltd. v. *Davison. Chancery Division. Before Mr. Justice Maugham.*

This action is of interest because of the point decided by the Court in regard to terms of an agreement for a tenancy and the right of the landlord to withhold consent to sub-letting.

The plaintiffs, Thorpeness, Ltd., brought an action against Mrs. Dorothy Davison to recover possession of a furnished bungalow known as New Croft, Thorpeness, Suffolk, on the ground that she had committed a breach of her tenancy agreement by sub-letting the bungalow without the written consent of the plaintiffs.

Defendant by her defence relied upon a letter in which she said consent was given. She counter-claimed for damages for alleged interference with her right to quiet enjoyment of the premises.

Mr. Beebee, for the plaintiffs, who practically owned and ran Thorpeness, said the action was based on the alleged sub-letting of New Croft for August and part of September, 1928. Counsel said that the defendant went behind the back of the plaintiff and sub-let her bungalow to a Mrs. Farquhar, a most desirable tenant, without the consent of plaintiffs. When plaintiffs discovered this they felt bound to uphold the principle of the agreement. The letter on which the defendant relied was from the plaintiffs, in which they told her that her (defendant's) private arrangement with Mrs. Farquhar was not "in accordance with the terms of their agreement," and asking for particulars to enable them to adjust their commission charges. This letter, said counsel, was not answered and no consent to the letting was ever asked.

Mr. Roland Oliver, K.C., for the defendant, said the plaintiffs were angry at not getting their commission in this case. He submitted that the defendant had not committed any breach of her agreement, and that having got the consent of the plaintiffs it did not matter whether it was asked for or not. It was admitted that Mrs. Farquhar was above criticism as a tenant, and therefore in law the plaintiffs could not reasonably have withheld their consent to the sub-letting. Nor could the plaintiffs legally impose a fine in the nature of commission as a condition of their consent.

His lordship, in giving judgment, said he was of opinion that the letter of the plaintiffs meant that they had no objection to the sub-letting provided they were allowed to make out the agreement and their commission was paid. It was an assent on a condition which was the payment of something in the nature of a fine. That was contrary to section 144 of the Law of Property Act, 1925. Further under the Landlord and Tenant Act, 1927, the consent must not be unreasonably withheld, and it was admitted that Mrs. Farquhar was a respectable and responsible tenant. It had been clearly laid down in a number of well-known authorities that if a landlord asked for a fine as a condition of assent in such a transaction as this, or if he unreasonably withheld his assent, in either case the tenant was at liberty to effect the sub-demise without the assent of the landlord. It was stated that the company had brought this action to establish the principle that they were entitled to draw up the agreement and charge commission. His lordship said he wholly disagreed that they had any such right. The action therefore failed and would be dismissed with costs.

LIGHT AND AIR DISPUTE—A CASE FOR DAMAGES

Price v. *Hilditch. Chancery Division. Before Mr. Justice Maugham.*

This was an action by Mr. Walter Henry Price, the owner of No. 19 Surrey Road, Margate, against Miss Nellie Hilditch, of No. 17 Surrey Road, Margate, for a mandatory order to pull down a certain wall and building erected by the defendant in so far as it illegally obstructed the light of certain ancient windows of the plaintiff's house.

Mr. Gavin Simonds, K.C., and Mr. Nesbitt appeared for the plaintiff, and Mr. A. Grant, K.C., and Mr. Christy for the defendant.

Mr. Simonds said the issues for the Court were whether what was done by the defendant amounted to a nuisance, and if a nuisance, whether, having regard to all the circumstances, the appropriate remedy was injunction or damages. Plaintiff was the owner of No. 19 Surrey Road, which he let at £90 a year. Defendant's house was next, and a passage-way some 10 ft. wide, divided by a dwarf wall 3 ft. 6 ins. high, was between the houses. Plaintiff complained that the defendant had erected a building 42 ft. long and 23 ft. high over the passage on the side of her house, building on the site of the dwarf wall, which was her wall, and that this had interfered materially with the light coming to the plaintiff

kitchen and scullery. Defendant had suggested that a window should be cut in the scullery wall in the bay which opened upon the drawing-room window, but this suggestion plaintiff could not entertain. The result of the defendant's building operations were that the light to the kitchen and scullery was substantially diminished.

Mr. Geo. Holliday, a chartered surveyor, and Mr. John Douglas Scott, an architect, gave evidence that the lighting of both rooms had been very much interfered with and the light and amenities substantially decreased.

Miss Choisis, the tenant of No. 19, said she did not consider the kitchen and scullery were now adequately lighted.

Mr. Grant, for the defendant, said the real and serious issue here was the remedy. The defendant had spent £800 on the additions. His case was that the scullery was reasonably and adequately lighted and that the kitchen was practically not affected at all.

Mr. Percy Levett, an architect, of Margate, expressed the opinion that the quantum of light in the scullery was quite ordinary and with the reflected light he could read a newspaper in the remote end. The kitchen was adequately lighted.

Col. Stanley Page, of Margate, architect, surveyor and assessor, gave similar evidence and said the defendant's building had not affected the value of plaintiff's house one penny.

Mr. Potter, an estate agent of Margate, said the scullery was sufficiently lighted for all practical purposes. The kitchen was better lighted than the scullery. If the plaintiff's property had been depreciated, it was only to a small extent, if at all.

Other witnesses gave evidence to the same effect.

His lordship, in giving judgment, said it had not been established before him that the defendant's building was "rushed up" or that there was any attempt to "steal a march" on the Court. Under all the circumstances he could not think that this was a case in which the plaintiff could call upon the Court to make a mandatory order. The question was what was now to be done? He could not help thinking that some of the plaintiff's evidence was surprising. In his opinion the reflected light to the scullery did not make up for the loss of light owing to defendant's building. The light that now remained left the scullery a gloomy room, in which artificial light would have to be used to a large extent. The damage to the kitchen in regard to light was small compared with the scullery. In his judgment the plaintiff had suffered a legal wrong. In all the circumstances the case would be met by an award of damages, and he found for the plaintiff and ordered an inquiry as to the amount of damages the plaintiff was entitled to.

LITERATURE

THE HISTORY OF HITCHIN: VOL. II

IT would be a real gain if enthusiasts such as the writer of this exhaustive book could be found in every town and village in England, who would be willing to spend years of unremitting labour in compiling local records of every description and weaving them into a rich and interesting pattern. This is the second and concluding volume of *The History of Hitchin*. It covers a wide variety of subjects, based upon, and freely illustrated by, quotations from abundant contemporary accounts. The townspeople of Hitchin, through the centuries, live, move and carry on their business, both public and individual, their courts of justice and imprisonments, their sports, and their religious worship.

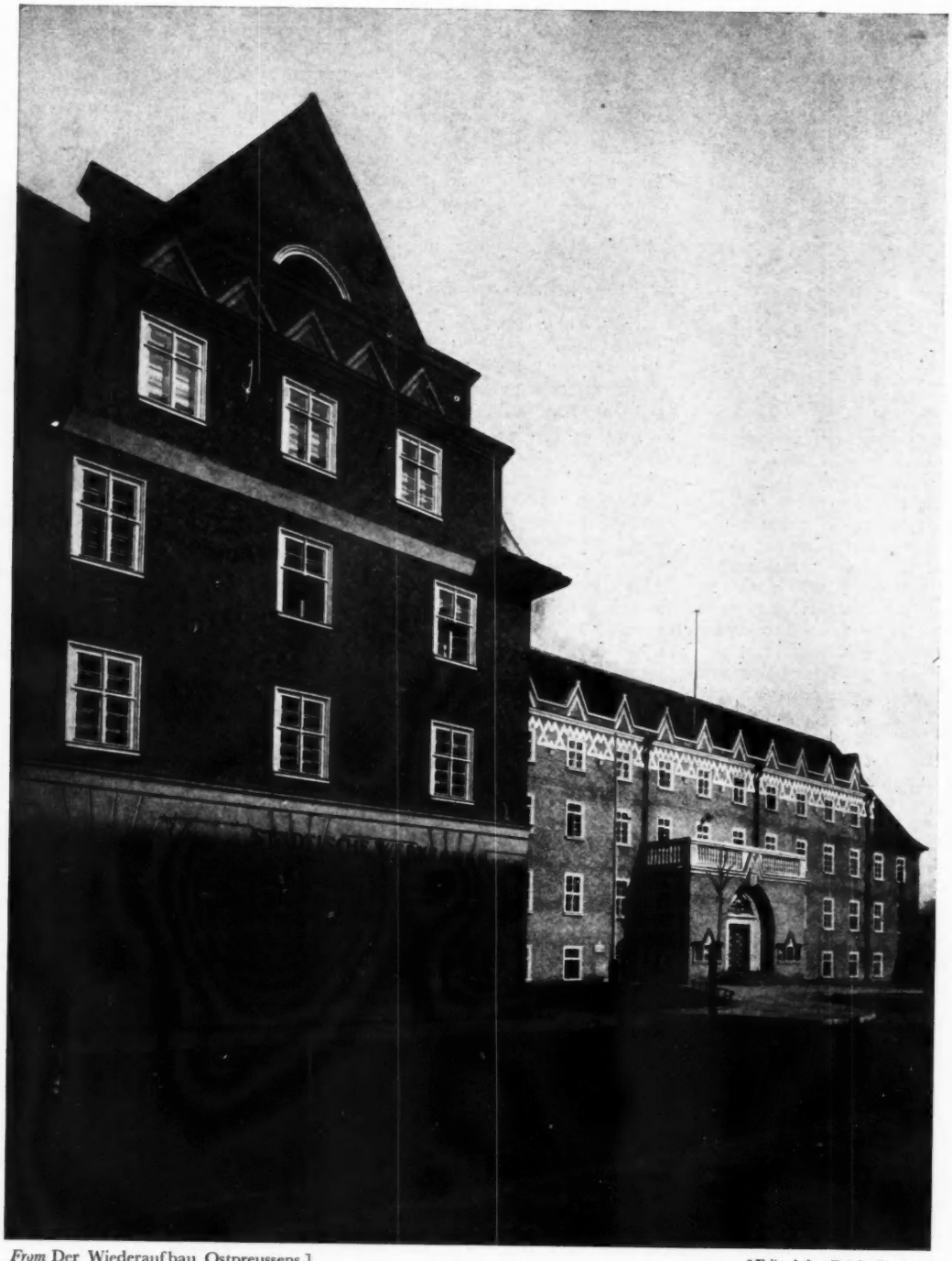
From a historical account of the now ruined chapel of Minsden, the book goes on to deal at some length in an interesting manner with the Puritans of Hitchin—and Hitchin, like Bedford, was a stronghold of Nonconformity. The "Church books" of the Baptists, the Independents, and the Quakers, provide an illuminating contemporary record of persecutions and vicissitudes, internal discipline and real piety. We read of how Hitchin people stole into the country to some cottage or dell to hear Bunyan preach as he passed by on his itinerary, sometimes, in pouring rain, with four women holding an apron over his bare head, or with scouts posted—or of Bunyan in disguise as a waggoner. Whitefield, too, preached in the fields till the sun made him faint with exhaustion.

There is a vivid portrait of Mercy Ransom, the Quakeress, in the handsome simplicity of her clothes, her strength of mind, her toils in the slums, her missionary journeys through England, Ireland, Scotland and Wales, her preaching in the London streets and in Hyde Park, her indefatigable visiting, her power to help and comfort.



From The History of Hitchin : vol. ii.] [*By Reginald L. Hine.*

Garden view of James Hack Tuke's house, The Croft, Hitchin. From a painting by James Lobley, 1873.



From Der Wiederaufbau Ostpreussens.] [*Edited by Erich Göttgen.*

Council House (Rathaus), Lyck, Germany. Designed by Herr Brurein.

Every aspect of the town life is touched upon, with authorities quoted, chapter and verse. Wills and testaments are the most human of documents, and here a long array of Hitchin citizens stand revealed in self-portraiture. The book is a mine of information, and the narrative runs easily and smoothly. It is a monumental work, the fruit of years of labour on the part of the author and his assistants.

The illustrations are from photographs of Hitchin, with portraits, and drawings by Samuel Lucas, from blocks engraved by Emery Walker.

ELEANOR K. D. HUGHES

The History of Hitchin: Vol. II. By Reginald L. Hine, F.S.A., F.R.Hist.S. George Allen and Unwin, Ltd. Price 15s. net.

GERMANY'S DEVASTATED REGIONS

IT is not generally realized that the five successive invasions of East Prussia by the Russian armies between August 1914 and March 1915 devastated over 17,350 square miles, or some three-quarters of this large and prosperous province. In the thirty-nine townships and 1,900 villages or hamlets temporarily occupied by the enemy,

41,414 buildings were totally and some 60,000 partially destroyed. Photographs of Schwirindt, Gerdauen and Ortelsburg, taken after their recovery, bear witness to ruin as desolating as anything seen on the Western Front, and no less complete for being more often the result of incendiarism than bombardment. It is only natural, therefore, that, in spite of the rural-architectural appeal of a very striking coloured dust-jacket, the book under review should be dedicated to "the Liberator of East Prussia," Field-Marshal von Hindenburg, now President of the Reich, commemorating, as it does, the wholly justifiable pride of his native province in having successfully terminated the reconstruction of its devastated areas.

Edited by an architect, who was himself actively engaged in that stupendous undertaking, this beautifully-produced volume, which is copiously illustrated with photographs, plans and maps, provides an admirably-documented, semi-official record of a splendid achievement.

Each of the ten chapters deals with a separate aspect of the province's restoration. They have been contributed by two of the leading architects employed and the seven distinguished civil servants who were directly responsible for its organization, supervision and finance. The original estimate of a milliard and a quarter gold marks (rather under £61,200,000) was barely exceeded, thanks to an administrative control that effectively precluded any possibility of the traffic in fraudulent claims which was such a scandalous concomitant of the reconstruction of the French war zones. Begun in 1915 and actually half finished during the war, the work was completed in 1925, notwithstanding the period of inflation which led to the collapse of the mark in 1923. An even more impressive thing about this immense concerted effort—which I would specially commend to Mr. Lansbury's notice—is that, though officialdom has always been regarded as omnicompetent in Germany, it was entrusted exclusively to architects in private practice.

This act of governmental self-denial has been amply justified by its fruits. Many of the rows of shops and houses illustrated are really charming. Serious exception, indeed, could scarcely be taken to a single detail on the score of taste. Street plans and building-lines, almost everywhere perpetuated in resuscitated Picardy villages, have been judiciously modified wherever an opportunity presented itself. Even the meanest cottage has been rebuilt to conform with the exemplary Prussian planning and building laws in regard to sanitation, the minimum number of rooms, and the minimum cubic and window space prescribed for each. So much for what has been gained on the utilitarian side. Comparison between buildings before and after, given on pages 180 and 181, shows that amelioration in seemliness, sightliness and general amenity is just as remarkable. Here again the contrast with France is anything but to her advantage. Though the domestic note is never allowed to exalt itself into affectations of a monumentality inapposite in quiet market towns, the gaiety and variety of groups of houses like those designed by Oberbaurat Lange in Eydtkühnen and Stallupönen enable small localities to express a distinctive architectural physiognomy. Something more human than mere model exercises in civic planning has been attained.

North Germany has very marked local mannerisms. These have been assimilated, reanimated, and then grafted on to more modern types of structure. It is particularly interesting to see forms, with which we are growing every day more familiar, beginning to emerge as early as 1915 from that intermediate chrysalis stage between Classicism and Modernism, vaguely described as Neo-Baroque. The doorways and fanlights are uniformly excellent. Good examples are those designed by Oberbaurat Lange (who has been responsible for more buildings than any of the eight architects whose work is represented), Paul Stephan and Erich Göttgen, the editor of this monograph. Notable among individual buildings illustrated are Herr Brurein's Rathaus at Lyck; the vicarage at Possessern; the courtyard entrance of a mansion in Schwirindt and the Haus Ebner in the same town; together with cow-byres on the Lindicken and Ranten estates, and a tile-works at Goldap, by Fritz Schopohl.

P. MORTON SHAND

Der Wiederaufbau Ostpreussens. Edited by Erich Göttgen, B.D.A. Grafe und Unzer Verlag, Königsberg. 12 Marks.

CORRESPONDENCE

FREE ADVERTISEMENT INSERTION

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Your generous offer of free advertisements for vacancies is sure to meet with a wide response. May we suggest that you make it a condition of your free insertion that salary is definitely stated both by employer and employees?

This step would remove a long-standing cause of friction and misunderstanding.

A. JOHN RICE, A.R.I.B.A.
P. J. WILLIS, M.A., A.R.I.B.A.
H. HAYCOCK, F.S.A.

PAINT ON CEMENT SURFACES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—It is a matter of common experience that when linseed oil paint is applied to cement-rendered surfaces which have not been given sufficient time to dry out, failure of the paint film often takes place. The degree of failure may vary from a few unsightly patches to a general softening and tackiness of the paint, sometimes accompanied by the formation of wrinkles and blisters containing a yellow liquid. Such a type of failure is also liable to occur on plastered surfaces.

It is commonly supposed that these failures are directly due to the presence of lime which, on account of its caustic nature, may destroy the oil film and also attack many classes of pigments, causing bleaching of the paint. On this account the pigments which resist attack have been termed "lime fast."

This type of failure has been the subject of recent investigation at the Building Research Station, and the results obtained have thrown rather a new light on the problem. After a series of tests, it has been demonstrated that such failures are not caused by lime alone, and that it is possible to paint on a freshly-prepared lime plaster surface without any softening or bleaching of the paint, even when the pigment used is not "lime fast."

If, however, soluble salts of soda or potash are also present, the paint film is quickly attacked unless the material is quite dry. The reason for the destruction of the paint is that, in the presence of moisture, the alkali salts are causticized by the lime, forming caustic soda and potash, which decompose the oil film. The tackiness which is experienced in such cases is due to the soluble soaps which are formed as a result of the reaction.

Portland cement nearly always contains both free lime and soluble salts of soda and potash. Hence painting upon Portland cement rendering before it is thoroughly dry and well matured (that is to say, before the free lime contained in it has been carbonated by a long period of exposure to the atmosphere) usually results in failure. Some classes of lime are liable to contain alkali salts whilst clay, introduced in dirty sand, is also a source of these salts.

Besides elucidating the cause of a number of failures experienced by painters, it will probably prove possible to utilize the reaction to demonstrate the presence in a given material of amounts of calcium hydroxide or soluble alkalis which are likely to cause trouble. It is hoped to publish shortly a full account of the experiments.

R. E. STRADLING,
Director of Building Research.

SOCIETIES AND INSTITUTIONS

LIVERPOOL CATHEDRAL

MR. G. H. FOGGITT, F.R.I.B.A., occupied the chair at a meeting of the West Yorkshire Society of Architects, held at Leeds, when the Rev. Canon W. Thompson Elliott delivered a lecture on "Liverpool Cathedral."

The lecturer first gave a brief history of the enterprise and said that it began with the acceptance of a design by the late Sir William Emerson. Sir William's scheme, however, was finally abandoned, and, after years of delay, a competition was held which resulted in the designs of Sir Giles Gilbert Scott being adopted.

The lecturer showed, by means of lantern slides, the relationship of the already executed portion to the contemplated whole, and dwelt upon the many characteristics of the buildings.

REGIONAL PLANNING

Mr. A. T. Pike, secretary of the Housing and Town Planning Association, discussing the intermixture of housing and industry at the concluding sessions of the Housing and Town Planning Conference organized by the Liverpool University Settlement for Students, said that today one saw industry occupying sites which would be better utilized for houses, and houses built on areas which were obviously industrial areas; so that when industry wished to extend, it either went in for the costly business of buying up houses or opening up in another part of the town and running two establishments. The type of upside-down town, in which everything was in its wrong place, was very costly.

If, he said, towns were planned from the beginning with each type of growth in its proper position, transport facilities, for example, would be less required, and that would be a means of considerable saving.

R.I.B.A. COUNCIL MEETING

Following are some notes from the minutes of a recent meeting of the R.I.B.A. Council :

The Twelfth International Congress of Architects, Budapest, September, 1930. On the recommendation of the Congress Committee it was decided to invite the following members to prepare papers for the Congress : (1) "Architectural Education in England in Relation to Practice," Mr. L. Sylvester Sullivan; (2) "The Registration of Architects in England," Major Harry Barnes; (3) "Architectural Copyright in England," Mr. W. E. Watson; (4) "The Rôle of the Architect in the Design of Industrial Buildings in England," Mr. R. A. Duncan; (5) "The Acoustics of Large Halls in England," Mr. Hope Bagenal.

The World Engineering Congress, Tokyo. A resolution of thanks was passed in favour of Mr. J. C. Wynnes, F.R.I.B.A., for acting as the R.I.B.A. delegate at the recent World Engineering Congress, Tokyo.

The British Engineering Standards Association. Mr. R. J. Angel, F.R.I.B.A., was appointed to represent the R.I.B.A. on the Committee recently set up by the British Engineering Standards Association to consider the standardization of commercial plywood.

The Council gave their formal approval to the extension of the province of the Liverpool Architectural Society which has taken place by reason of the North Staffordshire Architectural Association having become a branch of the Society.

The Council gave their formal approval to the affiliation of the Preston, Blackburn and District Society of Architects with the Manchester Society of Architects.

The Misuse of Power by Local Authorities. On the recommendation of the London Building Acts Committee the Council approved the publication of a note in the R.I.B.A. *Journal* asking members to submit evidence of cases in which local authorities appear to have exceeded their statutory powers.

The Fellowship. The Council by a unanimous vote elected Mr. R. H. Macdonald, of Montreal, to the Fellowship under the powers defined in the Supplemental Charter of 1925.

Membership. Nominations for membership were approved as follows : As Hon. Associates, 2; as Hon. Corresponding Members, 2; as Fellows, 18; as Associates, 43.

Reinstatement. The following ex-member was reinstated : As Licentiate, Mr. William Hull-Brown.

Application for election as Licentiate under Section III (*f*) of the Supplemental Charter of 1925. One application was approved.

Resignations. The following resignations were accepted with regret : Messrs. E. J. Wellman, F.R.I.B.A.; Charles Forsyth, A.R.I.B.A.; H. P. Briggs, L.R.I.B.A.; George C. Copestick, L.R.I.B.A.; Patrick Coughlan, L.R.I.B.A.; Alex. Gordon, L.R.I.B.A.; R. J. Hill, L.R.I.B.A.; G. Sharman, L.R.I.B.A.

Retired Fellowship. The following member was transferred to the Retired Fellowship : Mr. J. W. Stanley Burmester (elected fellow, 1891).

Election of Students. The following probationers were elected as students of the R.I.B.A. :

Albery, J. M. (Architectural Association).
Arthur, G. (Glasgow School of Architecture).
Briggs, J. W. (Leeds College of Art).
Brown, C. W. (Leeds College of Art).
Darroll, W. W. (Intermediate Examination).
Drury, E. (University of Manchester).
Fell, I. B. (University of Sydney).
Fish, J. (Intermediate Examination).
Gordon, H. V. (Architectural Association).
Gurney, H. V. M. (Intermediate Examination).
Hargrave, F. C. (University of Sydney).
Harrison, D. D. (Leeds College of Art).
Hutchison, R. C. (Edinburgh College of Art).
Lunn, N. S. (University of Liverpool).
Marks, J. (University of Liverpool).
Mills, E. M. I. (University of London).
Montague, A. V. (Leeds College of Art).
Needham, J. (Leeds College of Art).
Orpen, T. F. M. (Intermediate Examination).
Paterson, H. N. (Glasgow School of Architecture).
Pilichowski, A. V. (Architectural Association).
Rothwell, F. L. (Northern Polytechnic).
Walker, H. R. M. (Leeds College of Art).
Weerasinghe, O. (University of Liverpool).

STUDENTS AND ARCHITECTURE

The National Union of Students has issued an appeal for an Establishment Fund, to place its finances on a sound basis. This Union, it is claimed, is the only organization which links together the students in the different Universities and University Colleges of this country, and in turn provides the means of actual relationship with those of the Dominions and foreign countries.

Tours to various countries are arranged, on which groups of students can not only see the practice of their future profession in that country, but learn something of the mentality of the people of the country which they are visiting. During the seven years of the Union's existence, these tours have been arranged in architecture and fifteen other subjects.

Further particulars may be obtained from the Appeal Secretary, the National Union of Students, 3 Endsleigh Street, London, W.C.1.

BUILDING RESEARCH INTELLIGENCE SERVICE

There has been set up at the Building Research Station of the Department of Scientific and Industrial Research, an intelligence service, one of whose primary functions is to collect and disseminate all information available regarding building materials and methods of construction. This organization is devoted to the provision for the building industry of a continuous stream of information collected from all sources throughout the world. All new books and pamphlets and over 150 scientific, technical and trade journals in the various languages are scrutinized. All items of interest are classified and indexed and the information that has been accumulated in this way is available free to all inquirers.

Mr. William John Hale, of Tainby, Snaithing Lane, Sheffield, architect, left £10,887 (net personalty £7,000).

READER'S QUERY

RAIN WATER DISPOSAL

A. G. writes : "*A steel-framed building is to be erected, consisting of two parallel bays 204 ft. long, one roof slope from each bay draining into one centre longitudinal valley gutter. The total area of roof to be drained is approximately 11,000 ft. super, and it is proposed to use a 16-in. by 8-in. c.i. box gutter to receive the rain water. It is only possible to arrange outlets at each end of the gutter. Is the size proposed sufficient and what should be the size of down pipes at each end?*"

Assuming the area which drains *to the valley gutter* to be 11,000 ft. super, and the gutter to be level or practically so (without fall towards outlets), the capacity of the gutter should be sufficient to allow for any normal rainfall getting away, so long as the two outlets remain unblocked; 5-in. circular or 4-in by 3-in. rectangular down pipes without offsets or bends likely to check the flow would be suitable.

To provide against the contingency of abnormal downpour or a blocked pipe, it is advisable in such cases that the cast-iron box gutter should be projected clear of the end walls, the direct outlet to the down pipes being formed beneath the projecting portion, and as a safeguard against the gutter filling and brimming over within the building, ample overflow outlets (akin to gargoyles) should be formed at the open ends.

E. G.

COMPETITION CALENDAR

April 28.—Messrs. Josiah Wedgwood and Sons, Ltd., invite designs in competition for a Wedgwood Vase, to be made in commemoration of the Bicentenary of the Birth of Josiah Wedgwood, which will be celebrated this year. Assessors : Philip Connard, R.A., W. Reid Dick, A.R.A., H. S. Goodhart-Rendel, F.R.I.B.A., and Frank H. Wedgwood. Premiums : £100, £50 and £25. Full particulars may be obtained on application to the Secretary, Messrs. Josiah Wedgwood and Sons, Ltd., Etruria, Stoke-on-Trent. Latest date for submission of designs : April 28.

May 16.—Messrs. Ewart and Son, Ltd., in conjunction with the Association of Architects, Surveyors and Technical Assistants, invite designs for a lock-up hangar for an aeroplane. The competition is divided into two classes, for those over and under 25 years of age at midnight, May 15–16, 1930. Assessors : William H. Hamlyn, A.R.I.B.A., and Chas. McLachlan, A.R.I.B.A., with A. N. Cathcart as technical adviser with regard to roofing, ventilation and hot-water supply. Two prizes will be awarded in each class, namely, free places in the A.A.S.T.A. party to Madrid in September, including second-class rail and steamboat travel throughout and all hotel expenses, except personal expenses. Messrs. Ewart and Son, Ltd., reserve the right to publish or make use of any of the designs for which a prize is awarded, but do not reserve the right to build in accordance with any of them. Particulars of the competition, etc., are obtainable from A. Seymour Reeves, Secretary, A.A.S.T.A., 26 Buckingham Gate, S.W.1. Latest date for submission of designs : May 16, 1930.

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs : June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor : J. Ernest Franck, F.R.I.B.A. Premiums : £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs : June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor : Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor : H. V. Ashley, F.R.I.B.A. Premiums : £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs : July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall which is to be built on the site of the old town hall, at an approximate cost of £250,000. Assessor : Sir Brumwell Thomas. Premiums : £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs : July 31.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

10574. Tweed, H. J. Collapsible buildings, etc. April 3.

SPECIFICATIONS PUBLISHED

304327. Schaub, O. Shear-proof connection between the wood reinforcement and the concrete in wood-concrete structures.

327240. Ferrant, R. Floor construction.

308268. Lefevre, A. Reinforced-concrete constructional elements.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors, specialists and some of the sub-contractors for the buildings illustrated in this issue :

Café Royal, Regent Street, W. (pages 637-643). General contractors, Trollope and Colls, Ltd., and Higgs and Hill, Ltd. Sub-contractors : Moreland, Hayne & Co., Ltd., steelwork ; The Empire Stone Co., Ltd., Empire stone; Dent and Hellyer, Ltd., drainage, plumbing, etc.; George Jennings, Ltd., sanitary fittings; The Kleine Patent Fire Resisting Flooring Syndicate, Ltd., floors, roofs, flats, etc.; Richard Crittall & Co., Ltd., heating, hot water and ventilation; Cochran & Co., Ltd., boilers; Higgins and Griffiths, Ltd., and Higgs and Hill, Ltd., electric lighting ; Patent Victoria Stone Co., Ltd., stairs; Wotton and Sons, casements, sashes, etc.; Express Lift Co., Ltd., lifts ; J. A. King & Co., Ltd., pavement lights; J. Whitehead and Sons, Ltd., marble work to lavatories; The Art Pavements and Decorations, Ltd., mosaic work; Harold Cooper & Co., Kingsmill Art Metal Co., Caston & Co., Ltd., Jones and Willis, Ltd., Comyn, Ching & Co., Ltd., The Bromsgrove Guild, Ltd., and Bagues, Ltd., metalwork ; Higgs and Hill, Ltd., Harrods, Ltd., Hampton and Sons, Ltd., Robersons, Ltd., Paul Turpin, H. H. Martyn & Co., Sidney Laughton, Battiscombe and Harris, and Stratford-upon-Avon Guild, Ltd., decorations ; Sturtevant Engineering Co., Ltd., vacuum cleaning plant and despatch tube; Estey Organ Co., organ installation ; Benham and Sons, Ltd., kitchen equipment; Lightfoot Refrigeration Co., Ltd., ammonia ice-making and refrigerating plant ; Standard Telephones and Cables Co., Ltd., telephone installation ; Carter and Aynsley, Ltd., and Charles Smith, Sons & Co., Ltd., ironmongery ; J. A. Stevenson, carving.

Egham Post Office (pages 644-645). General contractors : Bunning and Fitton Adams, Ltd. Sub-contractors : Measures Bros., Ltd., steelwork; Macdougall and Son, wood-block floors ; Val de Travers, asphalt work to roof.

Mitcham Post Office and Telephone Exchange (page 646). General contractors : Wilson Lovatt & Co. Sub-contractors : Crittall Manufacturing Co., Ltd., steel casements ; N. F. Ramsay & Co., Ltd., bronze lamps; W. Aumonier and Sons, carving; Acme Flooring and Paving Co., Ltd., wood-block flooring; Humphreys, Jackson and Ambler, wrought-iron gates and grille.

House, Gervis Road East, Bournemouth (pages 662-663). General contractors. Hawkins Bros.

TRADE NOTES

For over three hundred years from its foundation in 1602 no artificial light of any kind was allowed to be introduced into the Bodleian Library, Oxford, but in 1913 the use of electric torch-lamps was permitted for staff purposes. On account of this lack of artificial lighting, it was necessary in winter to close the reading-rooms at 3 p.m. The proposal to instal the electric light into the building was brought forward in 1926 and finally approved in 1929. The contents of the library being of priceless value, quite irreplaceable and uninsurable, the most important point was to make the electrical installation perfectly safe.

A scheme has therefore been devised by which no flexible cords are used. The highest quality electric lighting wires enclosed in steel tubing are used and are conveyed to every lampholder whether they be portable fittings, pendants or other similar devices. All switches, lampholders and fittings of every description are metallically and electrically connected to the conduit, and the whole system earthed at many points, so that in the event of any improbable damage to an insulated wire, the only effect would be that the fuse protecting that circuit would "blow" and cut off the circuit from the supply until it was repaired. This system has been carried out throughout the reading-rooms and the picture gallery. Very little conduit is visible, in spite of the fact that no walls have been chased and no tubing sunk or hidden anywhere except under the floorboards.

In the upper reading-room and picture gallery, which are full of readers' desks and catalogue stands, a general lighting scheme of high intensity has been provided with no local illumination at all. This arrangement permitted the rearrangement of the desks, catalogue stands or bookcases without any alteration to the electric wiring. Each of these rooms is illuminated by nine Holophane reflector refractor units and 300-watt lamps.

These fittings are unobtrusive by daylight, and the shape of the glassware and lines of the four supporting chains blend with the architectural features of the room. The circuit wires are continued down to the lampholder from the junction box in the ceiling and are protected by a flexible metallic tube which is metallically connected both to the conduit and to the lampholder.

The older part of the building, the Duke Humphrey's Library, and the Arts and Selden Arts, are treated in an entirely different manner. Here the ceiling is painted, and of great beauty, and was required to be illuminated at night. Standards with wooden columns and heavily frosted enclosed bowls have been placed upon the tops of the projecting bookcases in the Duke Humphrey's Library, and on the tops of the gallery rails at the two ends. In each alcove in this library short brackets are clipped to the bookshelves, with metallic reflectors, and certain of the desks in other parts of the old reading-room have standards also with metal reflectors. The bookcases under the galleries are illuminated by a number of lamps with metal shades hidden under the mouldings. In every case the circuit wires are taken direct into the lampholder and each lampholder connected metallically to the conduit.

The illumination and electrical specifications for the installation were prepared by Messrs. Dolby and Williamson, Consulting Engineers, Westminster, S.W., and the entire electrical work has been carried out by Messrs. Hill, Upton & Co., of Oxford.



A corner of the picture gallery and the upper reading room of the Bodleian Library, Oxford, in which a safety system of electric lighting, here described, has been fitted.

Some interesting notes concerning the floors and ceilings adopted during the rebuilding of Nos. 23 to 29 Bouverie Street and Nos. 11 to 15 Whitefriars Street, now completed; and the rebuilding of No. 30 Bouverie Street and 9 and 10 Whitefriars Street, in course of progress, are given in a book recently published by the Tentest Fibre Board Company (1929) Ltd. The new building is for *The News of the World*, and the architect is Mr. A. Alban H. Scott.

The book shows the advantages of using Tentest for ceilings in conjunction with concrete. A photograph of a façade of the completed portion of the building forms the frontispiece, and on the opposite page are particulars of the constructional work involved. The machine hall, at basement level, covers three-quarters of an acre, and is spanned by massive bridge-like girders, which carry the stanchions of the five upper floors. Photographs and descriptions are then given of each of the various operations adopted during the construction of the ceilings.

To the hollow tile reinforced concrete floors, constructed upon rough timber shuttering, ceilings, it is said, were required of a material which would be fire-resisting, insulated as to sound and temperature, proof against condensation, and against damage due to vibration. They had of necessity to be of pleasing appearance, economical in cost, and capable of immediate and permanent decoration. The material forming the ceilings consisted of Tentest, supplied in sheets $\frac{7}{16}$ths of an inch thick by 8 and 9 ft. long by 4 ft. wide. These sheets were cut, by unskilled labour, into the exact lengths required to fit between the beams and girders supporting the floor, and were then laid face downwards on the shuttering. The next operation consisted of wetting down the back of the sheets. Water was applied freely, and allowed to remain for about ten minutes prior to the sheets being brushed with a stiff brush. The brushing raised the fibres on the back of the sheets, thus ensuring a key for the cement slurry, which was afterwards applied as a medium for securing adhesion of the Tentest to the underside of the concrete floors.

A stiff slurry of pure cement, mixed to a mortar-like consistency and laid to a thickness of at least $\frac{1}{8}$th inch, was next applied to the back of the Tentest. The slurry was applied whilst the Tentest was wet, and was worked only just ahead of each row of the hollow earthenware tiles which form the core of the concrete floor. Before bedding, the tiles were wetted on the underside to prevent undue absorption of moisture from the slurry. A pause was occasioned in order to place the reinforcing bars, which form the concrete ribs of the floor, in the spaces between the rows of tiles. During this pause the slurry between

the tiles was constantly wetted until the pouring of the concrete took place.

Concrete was then poured into the spaces, the mixture being sufficiently mastic to allow it to flow readily around the reinforcing bars, and brought flush with the top of the tiles. Additional concrete, necessary to complete the floor to a finished level, followed immediately, and was screeded off in the usual manner ready to receive a surfacing of asphalt terrazzo, or wood blocks, as desired.

After the temporary shuttering was removed the Tentest sheets were found permanently bonded to the floor, and, it is claimed, possessing all the fire-resisting and other properties required.

A new drawing office requisite has just made its appearance. It is called the "Ideal" frictionless tee square, and has been devised to avoid dust, rubber and loose graphite from pencils being ground into the drawing by the movement of tee square blades. By using an "Ideal" tee square the rubbing surface is reduced to a minimum as only the ebony edge is in contact with the paper. Frictional area, it is said, is reduced from 140 square inches to less than 10 square inches. Furthermore, the "Ideal" tee square is more easily moved than the ordinary type. It is made by Messrs. Douglas and Walls, Ltd., of 14 Tithebarn Street, Liverpool.

During last year approximately three million super yards of all-concrete road work, equivalent to 254 miles of 20-ft. carriage-way, were laid in the British Isles by the British Portland Cement Association, Ltd. This figure constitutes, it is claimed, a record for this type of construction, and shows the substantial increase of twenty-five per cent. over last year's figure. In the lighter trafficked areas approximately 164,651 super yards of the cement-bound road were laid during the year. This work has necessitated the production of at least 10,000 tons of steel, 120,000 tons of cement, 230,000 tons of sand and 460,000 tons of broken stone. For the manufacture of the cement and steel about 80,000 tons of coal were required.

Architectural Lighting, a new electric illumination bulletin, No. 8, issued by the Lighting Service Bureau, should be of service both to the electrical engineer and the architect. It is divided into two sections: the first dealing with the fundamentals underlying the subject, and the second presenting the various applications, suitably illustrated with successful examples. The incandescent lamp today finds application in almost every phase of human activity, and during the last few years it has rapidly become an indispensable adjunct to modern civilized life. Among the many interesting methods are lighting from panels in the frieze, lighting the ceiling, and providing a semi-indirect form of illumination, ceiling panels giving direct illumination and decorative luminous panels in the walls being used merely for effect.

THE ARCHITECTS' DIARY

WEDNESDAY, APRIL 23

KING'S COLLEGE, Strand, W.C.2. College term begins. **10 a.m.**

THURSDAY, APRIL 24

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. Exhibition of Architects' Drawings of 1800–1850. 10 a.m. till 8 p.m. Saturdays 10 a.m. till 5 p.m. Exhibition closes on May 24. **10 a.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. "Architecture in its Relation to Modern Life." By Alfred C. Bossom, F.R.I.B.A. **6.30 p.m.**

FRIDAY, APRIL 25

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

TOWN PLANNING INSTITUTE, Caxton Hall, Caxton Street, Westminster, S.W.1. "Road Surface Design." By G. L. Pepler, F.S.I. To be followed by a discussion. **6 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. West Wales (Swansea) Sub-Centre. "Surge Investigations on Overhead Line and Cable Systems." By S. W. Melsom, A. N. Arman, B.Sc. (ENG.), and W. Bibby, B.Sc. (ENG.).

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the works of Kodak, Ltd., Wealdstone. **2.15 p.m.**

SATURDAY, APRIL 26

Sunrise, 5.43 a.m. Sunset, 8.14 p.m.

MONDAY, APRIL 28

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Architects' Drawings of 1800–1850." By Professor A. E. Richardson, F.R.I.B.A., F.S.A. 8 p.m. Meeting of the Executive Committee. 4 p.m. **4 p.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. General Meeting. "Aerial Surveying and Archæology." By O. S. G. Crawford. 8 p.m. Exhibition of Wall Papers. 10 a.m. till 10 p.m. **10 a.m.**

NATIONAL FEDERATION OF RETAIL FURNISHERS, 11 Tavistock Square, W.C.1. Annual Dinner to be held at the Trocadero Restaurant, W.1.

TUESDAY, APRIL 29

R.I.B.A., 9 Conduit Street, W.1. Last day for receiving applications for the Intermediate Examination.

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the Armourers' and Brasiers' Company, 81 Coleman Street, E.C.2. **3 p.m.**

LONDON UNIVERSITY Term begins. **10 a.m.**

WEDNESDAY, APRIL 30

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Annual General Meeting. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

THURSDAY, MAY 1

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Annual General Meeting. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S.

FRIDAY, MAY 2

NATIONAL SMOKE ABATEMENT SOCIETY, 71 Eccleston Square, Westminster, S.W.1. "By-laws under section 5 of the Public Health (Smoke Abatement) Act, 1926." By C. J. Allpass, L.C.C. To be followed by a discussion. **3.30 p.m.**

ROYAL SANITARY INSTITUTE. At the Town Hall, Tunbridge Wells. Tea, 5 p.m. Discussion on: "Can the Slum be Abolished?" to be opened by H. T. Taylor, M.S.I.A. 5.30 p.m. Edward Willis, M.INST.C.E., F.S.I., M.INST.T., will preside. **5 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Meter and Instrument Section. "The Metering Arrangements for the 'Grid' Transmission System in Great Britain." By C. W. Marshall, B.Sc. **7 p.m.**

SATURDAY, MAY 3

Sunrise, 5.30 a.m. Sunset, 8.24 p.m.

ROYAL SANITARY INSTITUTE. At Tunbridge Wells. Meet at Town Hall for visit to the premises of the New Maternity Home, 10–12 Calverley Park Gardens, where the architect, A. S. Killby, F.R.I.B.A., will give a brief address. 9.45 a.m. Visit to the Isolation Hospital. 10.45 a.m. Light refreshments will be provided. **9.45 a.m.**

MONDAY, MAY 5

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition opens to the public.

TUESDAY, MAY 6

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Luminous Traffic Signals." By T. Austin. (Light refreshments at 6.30 p.m.) **7 p.m.**

WEDNESDAY, MAY 7

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "National Parks." By S. K. Ratcliffe. Sir Fabian Ware, K.C.V.O., K.B.E., will preside. **8 p.m.**

THURSDAY, MAY 8

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. Ordinary and Annual General Meetings. **6.30 p.m.**

FRIDAY, MAY 9

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual General Meeting. "The Rotary Automatic Telephone System." By J. W. Moffatt and J. C. Emerson. **6.15 p.m.**

SATURDAY, MAY 10

Sunrise, 5.18 a.m. Sunset, 8.36 p.m.

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Annual General Meeting. Address by G. C. Laurence, F.R.I.B.A., R.W.A., Chairman of Allied Societies Conference. **6.15 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 12

R.I.B.A., 9 Conduit Street, W.1. Ninety-sixth Annual General Meeting. **8 p.m.**

WEDNESDAY, MAY 14

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Annual Dinner at the Hotel Victoria, Northumberland Avenue, W.C.2. The Earl of Crawford and Balcarres will preside. 7.30 for 7.45 p.m. (Tickets 12s. 6d. each.) **7.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art to be opened by the Archbishop of Canterbury.

LONDON UNIVERSITY Presentation Day. Albert Hall. **2.30 p.m.**

THURSDAY, MAY 15

R.I.B.A., 9 Conduit Street, W.1. Annual Dinner to be held at the Guildhall, E.C.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual General Meeting, 6 p.m. Irish Centre (Dublin). At the Physical Laboratory, Trinity College, Dublin. Annual General Meeting, 7.45 p.m. Hampshire Sub-Centre. At Southampton, Summer Meeting. **6 p.m.**

FRIDAY, MAY 16

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Technical College, Dundee. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S. **7.30 p.m.**

SATURDAY, MAY 17

Sunrise, 5.6 a.m. Sunset, 8.47 p.m.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Second visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 19

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. General Meeting. "The Architectural Association, 1847–1930." By F. R. Yerbury. (Lantern Illustrations.) Exhibition of Architecture of Bloomsbury. Until June 14.

WEDNESDAY, MAY 21

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

THURSDAY, MAY 22

ARCHITECTURE CLUB. Dinner to Eric Mendelsohn. Particulars will be announced at a later date.

SATURDAY, MAY 24

Sunrise, 4.57 a.m. Sunset, 8.57 p.m.

MONDAY, MAY 26

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Recent Excavations at Ur." By C. Leonard Woolley, M.A., HON.A.R.I.B.A. **8 p.m.**

WEDNESDAY, MAY 28

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Father of English Pottery—Josiah Wedgwood, F.R.S., Potter, Inventor and Man of Science." By Harry Barnard. Frank H. Wedgwood will preside. **8 p.m.**

SATURDAY, MAY 31

Sunrise, 4.50 a.m. Sunset, 9.5 p.m.

MONDAY, JUNE 2

INSTITUTION OF ELECTRICAL ENGINEERS. Summer Meeting at the Irish Centre. June 2–6, inclusive. Assemble in the evening at the Gresham Hotel, Dublin.

TUESDAY, JUNE 3

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Motor trip in Co. Wicklow, including inspection of overhead transmission lines. Lunch and tea at Glendalough.

WEDNESDAY, JUNE 4

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Proceed by special train to Limerick for visit to the Shannon Scheme.

THURSDAY, JUNE 5

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Visit the brewery of Messrs. A. Guinness, Sons & Co. Lunch by invitation of the Company. Afternoon: Leave Dublin by special train for Belfast. Evening: Reception by the Lord Mayor of Belfast, Rt. Hon. Sir William Coates, at the City Hall.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BARKING U.D.C. Health Committee has asked the architect to submit revised plans and estimate for the erection of a clinic in the Town Yard.

The L.C.C. is to extend the Dickens housing estate at Hickman's Folley area, BERMONDSEY.

The Royal Institute of Public Health is appealing for financial aid for the scheme for erecting new premises in Queen Square, BLOOMSBURY, W.C.

The CHELSEA B.C. is negotiating for the sale of a large housing site in Manor Street, to a large philanthropic housing trust for development.

The CITY OF LONDON Corporation has granted the application of the Postmaster-General to erect three passenger bridges across and over Knightrider Street, in connection with the proposed telephone building on the site between Knightrider Street and Queen Victoria Street.

Plans passed at CLAPHAM: Alterations, 833 Wandsworth Road, for Messrs. Holliday & Greenwood, Ltd.; additions, Queenswood Court, King's Avenue, for Mr. H. P. Sanders; house, Bonneville Road, for Mr. G. W. Dorley Brown.

The COULSDON U.D.C. is considering the purchase of ten acres of land forming part of the Kenley Park Estate, for recreation ground purposes.

The COULSDON U.D.C. Housing Committee has instructed the surveyor to submit a report on the question of the provision of further Council houses.

The EAST HAM Corporation Electricity Committee has instructed the borough engineer to submit an estimate for the erection of the Plashet sub-station.

On behalf of Kerr's Bakeries, Ltd., Mr. W. S. Grice is to erect buildings in Tysoe Street, FINSBURY.

The FINSBURY B.C. has prepared a scheme for the development of a site in Margaret Street, by the erection of tenements comprising 773 rooms, at an estimated cost of £153,000.

The FULHAM B.C. Electricity Committee has reported that, in connection with the proposed extension of the generating station, Sir Cyril Kirkpatrick has recently concluded his negotiations for the acquisition of premises in Townmead Road. The suggested terms have been approved by the Central Electricity Board.

The L.C.C. is to invite selected firms to quote for the erection of extensions at the Geffrye Museum, HACKNEY.

The Kensington Housing Trust, Ltd., is to erect twenty-one flats at Kensal Road, KENSINGTON.

The L.C.C. recommends the tender of Messrs. Gee, Walker and Slater, Ltd., Westminster, for the erection of the final wing of the County Hall, LAMBETH, at a cost of £674,000.

Plans passed at PURLEY: House, Woodcrest Road, for Messrs. R. D. Taylor, Ltd.; house, Copse Hill, for Mr. J. G. Cooper; house, Hartley Down, for Mr. G. T. Fox; house, Manor Wood Road, for Messrs. R. D. Taylor, Ltd.

Plans passed by the SHOREDITCH B.C.: Building, site of 33 and 34 Eagle Wharf Road, 22–28 Bracklyn Street and 21 to 29 (consecutive) Parr Street; rebuilding factory, 23 to 28 (consecutive) Penn Street; warehouse, 19–23 Kingsland Road; factory, rear of 4–20 Hemsworth Street.

The L.C.C. is to invite selected firms to quote for the reconditioning of Queen's Hospital, SIDCUP.

Plans passed at STREATHAM: Pump house, Factory Square, for Messrs. Bleach and Dorey; four houses, De Montford Road, for Mr. A. Soden; alterations and additions, 7 Rosedene Avenue, for Messrs. G. J. Green and Son, Ltd.

Messrs. White and Johnson are to erect a market at the corner of High Street and Totterdown Street, TOOTING.

Plans passed by WANDSWORTH B.C.: Three houses, Balham Park Road, for Mr. G. Ansell; alterations and additions, 195 High Street, for Messrs. J. H. Dewhurst, Ltd.; house, Roehampton Lane, for Messrs. W. Willett, Ltd.

The WANDSWORTH B.C. is seeking sanction for a loan for the erection of baths at Manor Street, Clapham, the estimated cost of which is £68,000.

SOUTHERN COUNTIES

The Kent Education Committee is to enlarge the central school at CRAYFORD.

The DARTFORD U.D.C. has decided to prepare plans for the erection of slipper baths, on a site in Spiral Road.

The DARTFORD District Joint Hospital Board has arranged for the purchase of land for the extension of the hospital.

The New Ideal Homesteads, Ltd., are to erect one hundred houses on the Heathlands estate, DARTFORD.

The DARTFORD U.D.C. is to erect an electricity substation in Shepherds Lane, at a cost of £3,248, to supply the Heath Close, Heath Farm and Whitehill estates now in course of development.

The Swanscombe U.D.C. has purchased land at KNOCKHOLT for a housing scheme.

Plans passed by the NORTHFLEET U.D.C.: Six houses, Napier Road, for Mr. A. Reed; building, Watling Street, for Callender's Cable and Construction Co., Ltd.; bungalow, Longfield Avenue, for Mr. A. Aldridge; four houses, Coulton Avenue, for Messrs. R. Hopkins and Sons.

The Kent Education Committee has purchased a site at SANDWICH, for the erection of a central school.



House, Gervis Road East, Bournemouth. Designed by Mackenzie and Phillips. The half-timber work to the exterior has been executed in English oak with nogging between timbers. The roof is covered with hand-made sand-faced tiles. For ground- and first-floor plans see page 663.

SOUTH-WESTERN COUNTIES

The Hampshire Education Committee is to enlarge the Brook Street Council School, BASINGSTOKE, by providing additional accommodation for about 180 children; to provide a new public elementary school of the standard type to accommodate approximately 450 senior girls, and capable of extension to accommodate approximately 490 senior girls, and also to provide a new public elementary school of the standard type to accommodate approximately 320 junior mixed, and capable of extension to accommodate approximately 360 junior mixed.

The BOURNEMOUTH Education Committee is to enlarge and adapt the Lansdowne Council school as a senior school for the central and western parts of the borough.

The Hampshire Education Committee is to enlarge the CHILWORTH and BADDESLEY school, by providing additional accommodation for about 120 children. It is also to erect a new senior public elementary school to accommodate about 200 children.

The Hampshire Education Committee is to erect a mixed school at CHRISTCHURCH, at a cost of £21,000.

The Oxford Education Committee is to extend the COWLEY senior school at an estimated cost of £7,500.

The DORCHESTER Corporation Housing Committee is considering the question of the type of houses to be erected upon land proposed to be acquired at Victoria Park.

The Hampshire Education Committee is to erect a new junior mixed school at Shakespear Road, EASTLEIGH, at a cost of £12,000.

The Hampshire Education Committee is to erect a new elementary school to serve the parishes of HEDGE END and WEST END, to accommodate about 360 children senior mixed.

The OXFORD Education Committee is to enlarge the Headington Council school, at an estimated cost of £3,560.

The OXFORD Corporation has decided that, in carrying out the proposed extension of the Bodleian Library on the north side of Broad Street and on the west side of Parks Road, the University be required to conform to a building line prepared by the city engineer.

The Hampshire Education Committee is to erect a new senior mixed school at TOTTON, at a cost of £25,350.

EASTERN COUNTIES

The COLCHESTER Corporation has arranged with the County Council for widening the second railway bridge on the Ipswich Road.

The HERTS C.C. has decided to provide further accommodation at the Hemel Hempstead poor law institution, together with accommodation at the nurses' home. Land is being acquired for the purpose.

The HERTS C.C. proposes, in connection with the Bishop's Stortford poor law institution, to have plans prepared for a hospital with accommodation for 150 beds; to consider the necessity for the removal of the tramp wards and erecting new ones on another site; and reconstructing the institution to be suitable for aged people.

The LOWESTOFT Corporation is to prepare a scheme for the erection of 100 houses on sites suggested by the borough engineer.

The LOWESTOFT Education Committee has approved the revised plan for the erection of the special subjects wing of the proposed new secondary school on the St. Margaret's Road, as submitted by the borough surveyor, at a cost of £3,704.

Plans passed by LOWESTOFT Corporation: Additions, offices, London Road, for Messrs. Norton, Peskett and Forward; house, Corton Road, for Mr. H. C. True; additions, Primitive Methodist chapel, Hall Road, Oulton Broad, for trustees; store, Crown Brewery, Crown Street, for Messrs. E. and G. Morse; two houses, Blackheath Road, for Mr. R. Spooner; two houses, Kirkley Run, for Mr. G. A. Gaze; house and shop, Beckham Road, for Mr. J. Chennery; bungalow, Kirkley Run, for Mr. S. C. King.

The Essex C.C. has purchased a site for a proposed new poor law institution for the SAFFRON WALDEN district.

Herts Education Committee has purchased a site in Hatfield Road, ST. ALBANS, for the erection of an elementary school.

The Herts Education Committee has decided to purchase a site at ST. ALBANS, for the erection of a secondary school.

MIDLAND COUNTIES

The Warwickshire Education Committee is to prepare plans for the erection of an elementary school for 400 children at ANSLEY.

The Warwickshire Education Committee is to extend the central school at ARLEY to accommodate a further 150 children; and enlarge the GUN HILL school for another 100 scholars.

The Warwickshire Education Committee is to enlarge the central school at ATHERSTONE, at a cost of £3,600.

The COVENTRY Corporation is to erect ten additional houses at Harnal Lane rehousing site, at an estimated cost of £3,000.

The Worcestershire C.C. has asked the county architect to prepare plans for modernizing the CRADLEY police court.

At a meeting of the DUDLEY Corporation the borough engineer submitted a plan of the proposed layout of the Priory Park and was instructed to prepare a preliminary scheme to the extent of £4,000, for submission to the Unemployment Grants Committee for a grant.

The Worcestershire Education Committee has purchased a site at EVESHAM, for the erection of a senior school.

The Warwickshire Education Committee is to remodel and enlarge the Council school at HALFORD.

The Worcestershire C.C. is obtaining reports regarding a proposal for the construction of a bridge over the River Severn at HIGHLEY, the cost of which is estimated at £120,000.

The MARKET HARBOROUGH U.D.C. has decided to purchase twenty-three acres of land and has instructed the surveyor to prepare a layout plan providing a site for approximately fifty houses, pleasure grounds, new sixty-feet by-pass road from Northampton Road to East Farndon Road, also showing a site for a new senior Council school and grounds which it is proposed shall be purchased from the Council by the Leicestershire County Council Education Committee.

The Worcestershire Education Committee has prepared plans for the erection of a senior school at PERSHORE.

The Worcestershire Education Committee is seeking sanction for a loan of £30,000, for the erection of a secondary school at REDDITCH.

The SMETHWICK Watch Committee has passed plans of proposed alterations to the Princes Hall Cinema, for Mr. E. Hewitson.

The STOKE-ON-TRENT Corporation Fire Brigade Committee has authorized the city surveyor to consider a possible new site and also prepare an estimate of the cost of a new fire station.

Plans passed by the STOKE-ON-TRENT Corporation: Six houses, High Lane, Tunstall, for Mr. C. Kearton; four houses, Hilderstone Road, Meir, for Mr. A. E. Cross; alterations and additions, Newport Lane, Burslem, for Dalehill Mills, Ltd.; thirty-two houses, Milton Road, Sneyd Green, for Messrs. Shenton Bros.; six houses, Milton Road, for Mr. B. S. Phillips; alterations and additions, Waverley Hotel, Market Street, Hanley, for Messrs. Birkett and Grant; workshops and stores, Etruria Road, Hanley, for Messrs. Weir (Glass), Ltd.; twelve houses, Trafalgar Road, Hartshill, for Mr. H. Cartledge; six houses, The Avenue, Harpfields, for Mr. R. L. Jones; 112 houses, Stoke Lodge estate, Trent Vale, for Sutton Trustees; alterations, Railway Hotel, High Street, Fenton, for Holt Brewery Co., Ltd.; shop premises, Market Street, Longton, for Messrs. Burton, Ltd.; butchery department, Anchor Road, Longton, for Burslem Co-operative Society, Ltd.; four houses, Caledonia Road, Hanley, for Mr. G. L. Jones; eight houses, Cauldon Road, for Messrs. Holloway & Co.; six houses, High Lane, Tunstall, for Mr. C. Kearton; additions, Boothen Tile Works, Stoke, for Messrs. J. H. Barratt & Co., Ltd.; alterations, Prince Albert Inn, Lower Hadderidge, Burslem, for Messrs. Ind Coope & Co.

The Warwickshire C.C. has made arrangements with Mr. J. G. Gray, for the construction of a new main road through his building estate at STIVICHALL, which will be commenced shortly.

The WALSALL Corporation is to submit to the Ministry of Transport a revised programme of strengthening and improvement of canal and railway bridges, at a cost of £18,500.

The WALSALL Corporation is to erect an extension at the rear of the Council House near the County Court, in accordance with plans prepared by the borough surveyor, at an estimated cost of £6,500.

The Warwickshire Education Committee is to erect an elementary school for 300 children at WYKEN.

NORTHERN COUNTIES

The BOLTON Education Committee is to erect handicraft centres at Chalfont Street and the Haigh schools.

The Church Army Housing, Ltd., has under consideration the possibility of promoting a housing scheme in BOLTON.

The DURHAM County Education Committee has decided that the mining instruction centre for the West Stanley area should be erected on the Scott's cottages site.

The MANCHESTER Corporation is to erect three conveniences at Moss Side, Oldham Road and Deansgate, at a cost of £5,400.

The OLDHAM Corporation Baths Committee has approved the plan of the proposed washhouse at Hollinwood.

Plans passed by the OSSETT Corporation: Extensions, Coopers Arms Hotel, for Springwell Brewery, Ltd.; cottage, Haggs Hill Road, for Mr. A. Wilkinson; alterations, Carlton House and cottage, Dale Street, for Mr. T. Teal; workshop, Northfield Avenue, for Messrs. Spencer and Halstead.

The ROTHERHAM Medical Officer of Health urges a scheme to be prepared for the provision of further housing accommodation so that the slums may be cleared.

The managers of St. Walburga's Roman Catholic School, SHIPLEY, are to extend the premises to accommodate an additional 150 scholars.

The STRETFORD U.D.C. is considering the provision of a new health clinic.

The STRETFORD U.D.C. has received sanction to borrow £3,655 for additions to Victoria Park elementary school.

The TYNEMOUTH Corporation is asking the Town Improvement Committee to consider proposed sites for new baths and washhouses.

The YORK Corporation is to prepare a scheme for the erection of conveniences in various districts.

The managers of the Fifth Avenue Roman Catholic school, YORK, are to provide additional accommodation for 150 children.

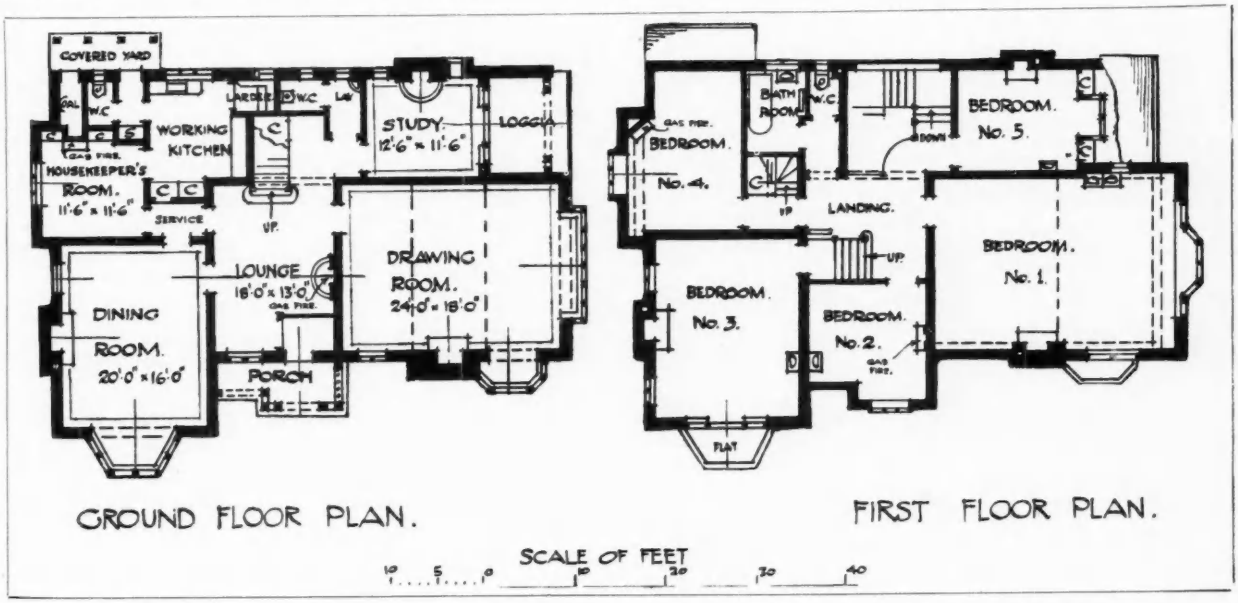
WALES

The CARDIGANSHIRE C.C. has asked the surveyor to prepare a scheme and plans for alteration of a number of bridges considered dangerous to road traffic.

The SWANSEA Corporation is to prepare a scheme for extensions at Rheanfa Hospital, at an estimated cost of £18,000.

The SWANSEA Education Committee is seeking sanction to borrow £47,054, required for the proposed improvements and additions to the intermediate girls' school.

Plans passed by the SWANSEA Corporation: Reconstruction of "Park Buildings," Portland Street, for Mr. Evan Rees; four houses, Pwll-y-domen Road, for Messrs. Weaver Bros.; three houses, Carmarthen Road, for Messrs. Thomas and Jones; house and shop, Eaton Road, for Mrs. R. Jones; house, Robert Street, for Mr. H. Ll. James; rebuilding, 31 Waterloo Street, for Messrs. J. Bloomberg and Sons; house, Zouch Street, for Mr. J. Jewell; office and loading platform, Great Western Railway sidings, rear of Neath Road, Hafod, for Shell-Mex, Ltd.; two houses, Pinewood Road, for Mr. J. Davies; two houses, Moorside Road, for Messrs. Marriott and Skone; twelve houses, new road off Townhill Road, for Mr. Ben Jones; house, Gower Road, Killay, for Mr. H. T. Adams; two houses, Lon Gwynfryn, Cwmgwyn, for Mr. Dl. Phillips; house, Stepney Road, for Mrs. Wright; house, Le Mayals, for Mr. T. Brader; pavilion and sub-electric station, St. Helen's Cricket and Football Ground, for the Committee; house, Gower Road, Killay, for Mr. R. K. Bellingham; new road, off Hadland Terrace, Norton, for Messrs. W. J. Rees and Partners; two roads, Manselton, for Sir C. Mansell; seventy-six houses, Penlan, Treboeth, for Mr. Ll. L. Thomas; two shops, Sketty Road, for Mr. Hubert Roberts.



House, Gervis Road East, Bournemouth. Designed by Mackenzie and Phillips. Ground- and first-floor plans. The principal rooms are panelled in oak. The newels and balusters of the staircase date from the sixteenth century and have been re-used from an old demolished country house.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I s. d.	II s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorgan-shire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour ;* NAVVY, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

	£	s.	d.
Portland cement, per ton	2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day :

	£	s.	d.		£	s.	d.
Cart and horse	1	3	0	*Trailer*	0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
IF left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 1 17 6
DO. 6-2-1, per yd. cube 1 12 6
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 14 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* BRICKLAYER, 1s. 8½d. *per hour ;* PLUMBER, 1s. 8½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Stoneware pipes, tested quality, 4 in., per ft.	0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3
Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9¼ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour ;* DO. *fixer,* 1s. 9½d. *per hour ;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
Portland Stone :			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0
Add to the foregoing prices, if in York stone, 35 per cent.			
DO. Mansfield, 12½ per cent.			
Deduct for Bath, 33⅓ per cent.			
DO. for Chilmark, 5 per cent.			
SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour ;* TILER, 1s. 8½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

	£	s.	d.
Slates, 1st quality, per 1,200 :			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

	£	s.	d.
Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal :

	£	s.	d.
Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

	£	s.	d.
Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour ;* JOINER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*

	£	s.	d.
Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds) :			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1⅛ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1⅛ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1⅛ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1⅛ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	6	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2½	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ⅛ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.

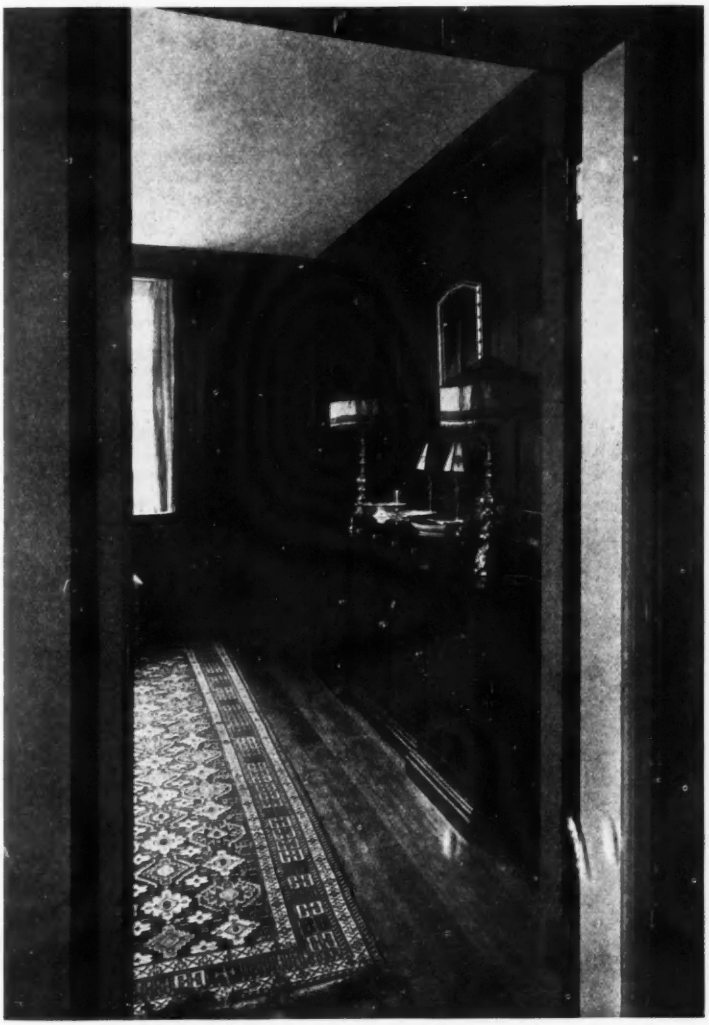
The measured work price is on the same basis . . . per ft. sup. £0 0 2½

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. from	0	2	3
Asbestos sheeting, ⅛ in., grey flat per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.			¾ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6			
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6			
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1	0½	10	—		
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1	6	—	—		
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1	0	—	—		
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—	—		



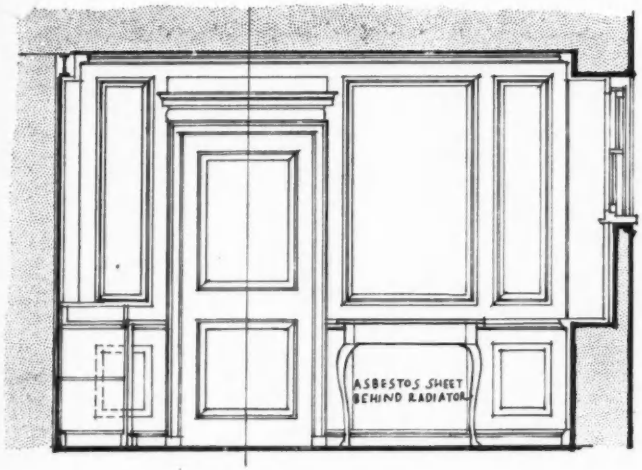
PANELLED DINING ROOM: No. 1 HAMPSTEAD WAY, N.W.11.
For and by
C. H. JAMES

THIS room, built in 1922, is panelled in Californian redwood (sequoia). The sideboard, side-table and table are of Australian blackwood, relieved by cross bandings of the same material. The whole of the woodwork except the floor, which is also of blackwood, is fumed to a dark purple by the Drytone process. The ceiling is painted with metallic paint of orange gold colour.

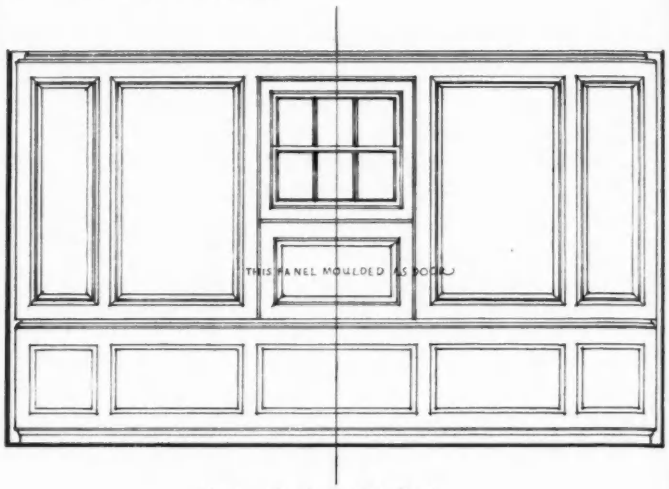
The room being very small—only 13 f by 10 ft.—every inch of space was of value; hence the recessing of the sideboard 4 ins. into the wall, which, behind it, is reduced to 1 in. of expanded metal and cement. The table was carefully proportioned to the size of the room, making it possible for six persons to dine in comfort. The serving table covers a radiator—the only means of heating in the room.

The large panels made possible by the use of sequoia, which is obtainable in very large widths, have never moved; but in building a similar room today plywood would obviously be used in preference to so soft a pine. The blackwood furniture took a wonderful polish in quite a short time.

The architect's working drawings are reproduced on the following page.



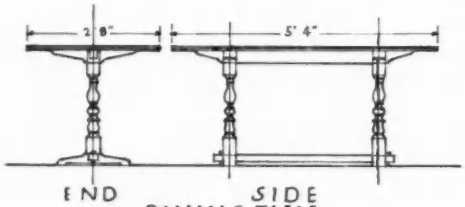
NORTH SIDE



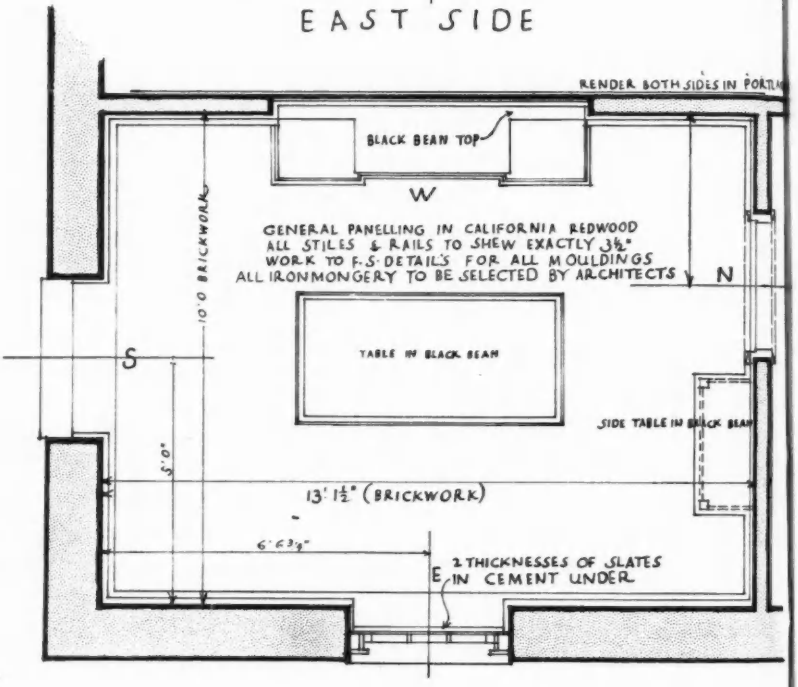
EAST SIDE

HOUSE AT HAMPSTEAD FOR C.H. JAMES

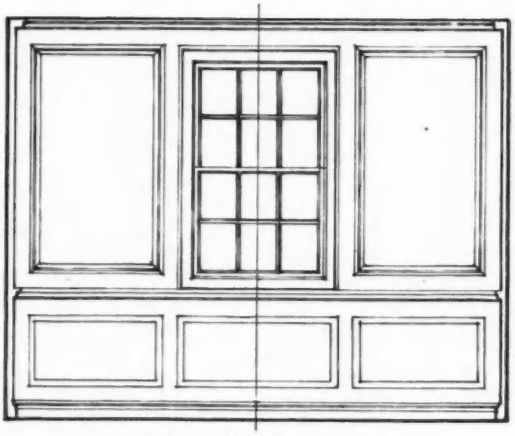
DETAILS OF DINING ROOM PANELLING & FURNITURE



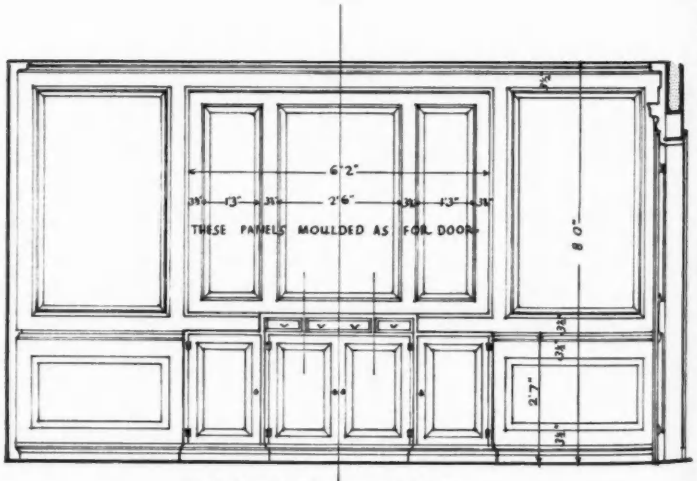
END SIDE
DINING TABLE



PLAN

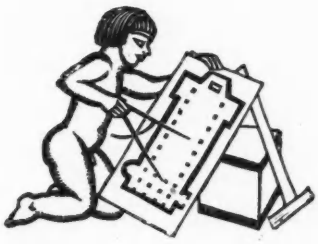


SOUTH SIDE



WEST SIDE

For photograph, see previous page.



WEDNESDAY, APRIL 30, 1930

COMPETITION CONDITIONS

A Lead from the Corporation of Kingston-on-Thames

THE question of the proper promotion and conduct of architectural competitions is one upon which most architects hold very definite views. It is difficult for those who have met with considerable success to advocate any change in the system under which, in open competitions, conditions are drawn up and awards made by a supposedly competent assessor. It is as difficult for those who have tasted too much of the bitterness of defeat not to question in principle the competitive system, or the wisdom of an assessor who has failed to appreciate the merits of their wasted labours.

Let us admit all this at once. The fact is that though theoretically the competition system is the fairest method of selecting an architect for an important building, many awards within our recollection have been unsatisfactory to the promoters, or to both promoters and competitors. The frequent competitor is driven to assume the armour of cynical indifference and, given a certain standard of competence, to take his chance in a lucky dip in which success probably depends upon evading, ignoring or definitely breaking clearly defined conditions.

Do the " Conditions " mean what they say? Will they be enforced? Will the assessor like the competitor for " playing up to him " in imparting to his designs just that touch of modernism or the antique which he is supposed to favour, or will he hate him for it?

There are, it appears, three possible ways of escape from a situation that has admittedly been unsatisfactory in the past :

(a) Conditions must be clearly laid down, be concise and definite, and admit of no variety in interpretation as to specific requirements; and they must be rigidly enforced in every particular, the penalty for infringement being disqualification.

(b) Apart from the statement as to the required accommodation, in general terms, the limits of the site, and the amount to be expended, competitors must have a perfectly free hand. Virtually there are to be no conditions.

(c) Certain conditions must be absolute and binding, certain specific accommodation being regarded as essential; but otherwise, within the limits of the site, it may be " suggested " that other accommodation is desirable, competitors being free to make any modifications in providing further or alternative accommodation as they think fit. Competitors must estimate the cost of the building.

Accordingly, it is with great pleasure and interest that we turn to the recently issued Conditions of the Competition instituted by the Royal Borough of Kingston-on-Thames for Proposed Public Swimming Baths, and examine the manner in which they have been drawn up. It is true that the document is far too long and that some of the remarks are redundant. We all know, for instance, that " sound grouping and good proportion are most essential "; and that the building should have " architectural merit " is not such a novel requirement as it may seem. We do not believe that any competitor is likely to submit a scheme in an architectural competition which he does not believe has " architectural merit."

It is not upon these grounds that we commend these conditions, but on account of Clause 18, which is most significant as being an indication that a move is being made in the direction of our possible solution (c).

Clause 18 in the Conditions of the Kingston Competition is as follows :

> The requirements of the Corporation are given in the following schedule, and whilst the sizes of the Baths ponds and the number of Slipper Baths are to be adhered to, Competitors may make modifications, providing further or alternative accommodation, fitments or fittings which they may deem desirable. The general spirit of the instructions should be adhered to, and compliance with the Schedule, whilst not absolutely binding (except as stated), will be a matter of first importance.

In other words, the Corporation of Kingston requires certain definitely stated accommodation; the Council would also *like* additional accommodation, but in this respect a certain latitude is allowed to the competitors, who are to follow " the general spirit of the instructions," which indicate that a good up-to-date bathing establishment is required and that the architect who can best interpret this requirement will be successful.

We trust that the assessor will have no difficulty in making his award, and that the promoters of the competition and the competitors will have every reason to be entirely satisfied with the result.



THE HOLKER LAW LIBRARY, GRAY'S INN, W.C.:
BY SIR EDWIN COOPER, A.R.A.

The new library at Gray's Inn is a recent example of the work of Sir Edwin Cooper, who, with Mr. A. K. Lawrence, the mural painter, was last week elected an Associate of the Royal Academy.

This view of the interior is taken looking towards the octagon, which, situated on the axis of the old, or Middle Library, was the determining factor in planning the new one, which branches away at right angles. The materials used include Austrian oak and limewood carving, an oak floor, laid in narrow widths, and fibrous plaster. The balustrades to the galleries are in wrought iron and bronze, and the furniture is in oak. The portrait over the fireplace is of Justice Holker.

NEWS & TOPICS

SIR EDWIN COOPER'S ELECTION TO THE R.A.

THE election of Sir Edwin Cooper as an Associate of the Royal Academy will cause general satisfaction in the profession, and, indeed, one may well wonder why the honour has been deferred so long. To have designed two such buildings as that of the Port of London Authority and the new Lloyds is surely a notable distinction, and even if Sir Edwin had done nothing else he would have set his mark upon the metropolis and secured for himself a considerable reputation. But Sir Edwin is still at the height of his powers, and we may expect that the great structure that will house the national headquarters of the National Provincial Bank, a further section of which is now in process of erection, will be followed by other important city buildings bearing his imprint.

★

The work of Sir Edwin Cooper provides emphatic proof that it is still possible to erect a building having the most modern internal equipment but yet exemplifying the Classic style. It shows, moreover, that this same style, so far from being effete or lifeless, can suitably cloak architectural forms possessing very great vigour of outline. I have occasionally listened to hostile critics of the Port of London Building, but I have never heard it blamed for any lack of virility in conception. And even if this very solid, ceremonial and much-decorated architecture is a little out of favour among our modern puritans, it may still survive to give pleasure to a later generation. In the city of London, where there still appears to be a preference for the Classic, the new Lloyds takes its place extraordinarily well and, moreover, the back elevations of this building, which I have not yet seen co nmented upon in any criticism, are examples of urban street architecture of a pleasant yet unobtrusive kind.

WHAT SHOULD HAPPEN AT CHARING CROSS

Professor Adshead's letter to *The Times* of April 17 rather crystallizes the best-informed opinion on the subject of Charing Cross Bridge. The findings of the Select Committee have served to show, as he remarked, that the official scheme has laid too great a stress upon traffic problems to the exclusion of other very important factors.

★

An adjournment of one month is not time enough to consider the real problem of where the Southern Railway station is to go, and no scheme can be formed until the railway can see their way to manage their suburban traffic even a little less adequately than was possible with the old station. The official scheme, condemned on the south bank, is as worthy of condemnation on the north. Much consideration of the real underlying factors of town-planning should stand between now and the happy time when a final scheme may be thrown open to public competition.

WANTED : A MINISTRY OF FINE ARTS

Every proposal for controlling and improving the architectural and other amenities of this country leads us nearer to the establishment of a Ministry of Fine Arts or some such similar body. It is obvious to anyone who has looked into the question that there exists no central authority with sufficient power of veto, and no co-ordinated official body of taste with any hold upon the popular imagination. The Ministry of Health influences the æsthetic side of many forms of amenity through Town Planning and other Acts, but this power is used politically and cannot be relied upon, while the Fine Arts Commission has to be asked for its limited opinion. When one realizes that power lies in these scattered and conflicting bodies and with whomsoever may set themselves up to be judges and arbiters of taste, it will be seen that a directed policy of encouragement and guidance is impossible.

★

A Ministry of Fine Arts might be a class of dryasdust busybodies, though it would be more likely to be a body of zealous, intelligent and cultivated men, acting without political bias for the public good. One has only to compare the B.B.C. with the wireless broadcasting of other countries to see what may be done by a centralized control of this sort. I think a Ministry of Fine Arts is something very well worth talking about.



The seventeenth-century King's Head Inn, Winchester, threatened with demolition to make room for a cinema.

VANDALISM IN WINCHESTER

Readers who possess a strong magnifying glass should apply it to this illustration of the seventeenth-century King's Head Inn in Minster Street, Winchester, when they will read on the poster put up beside the public bar entrance the following words :

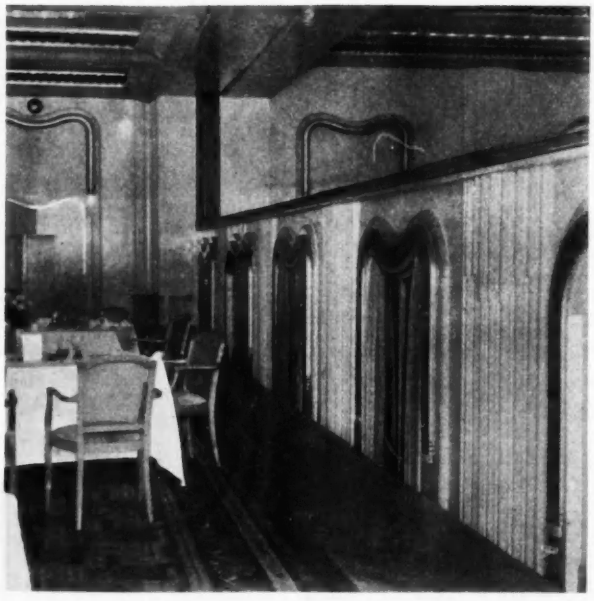
Site of
NEW
SUPER
CINEMA

The cinema is undoubtedly bound to come, but is it necessary that this charming front should disappear to make room for it ? There are people on the Hampshire County Council who think otherwise, and there seems a chance that the cinematograph licence may be granted only on condition that the front is left alone. This seems to me a wise and beneficial way of using existing legal powers to protect our amenities. I am aware that the building of a brand-new cinema behind an old half-timbered front is open to criticism, but our country towns are going to the devil so fast that what little we can do to retard this progress should be done. Unfortunately,

in this present case the liquor licensing authorities seem to be acting at cross-purposes with those who are in control of the cinematograph part of the business. Let us hope that they will put their heads together and work harmoniously for this good cause.

MR. ALFRED BOSSOM'S LECTURE

The profession in England stands to gain much by Mr. Alfred Bossom's decision of a few years ago to return from America to his native country. His genial personality, his energy and public spirit, and his exceptionally wide knowledge of American building methods are great assets. When I attended his lecture at the Institution of Structural Engineers last week, I could not help being struck by the wealth of his information upon numerous aspects both of architecture and of engineering, and also by the fact that he seemed especially intent upon utilizing the maximum



The 10-ton steel disappearing wall in the Empire Room at the Trocadero Restaurant, shown partly lowered through the floor. (Architect: F. J. Wills; Decorations by Oliver P. Bernard.)

constructional skill which we can muster for the purposes of social betterment. He spoke with deep conviction about the slum problem, and it is quite understandable how, though fighting in the Conservative interest, he so nearly captured an East End constituency in the last general election. In the event of his success next time, he should prove a valuable champion of architecture in the House of Commons.

★

Undoubtedly, it would be an enormous aid to housing reform if, by improved organization of building processes, we could erect healthy and suitable dwellings at a price which would make possible the payment of a reasonable interest upon money invested in them. Mr. Bossom, however, is fully alive to the dangers of excessive standardization in the American manner. Yet he made clear to his audience the magnitude of recent American achievements in architecture, and he laid particular stress upon the spiritual effect of skyscrapers, which, he claims, induce in those who behold them the desire to do great things. But all is not well in the Land of Progress, and it certainly comes as rather a shock when we are told that in certain streets in New York the first fourteen stories of a building must have their windows hermetically sealed because of the noxious fumes from motor cars in the streets below them.

MODERNISM AND THE MAN IN THE STREET

How do great blank spaces appeal to the man in the street—those calm, unfretted surfaces which the disciples of modernism contrive, and which are sometimes permitted to remain in all their expansive purity by owners of buildings? Pause before the new Underground offices in Broadway, Westminster, for fifteen minutes, any time between noon and 2.30 p.m., and listen-in to the comments of the very considerable number of people in whom that building and its embellishments implant the desire to speak, if not to protest. Epstein apart, the building holds them, and in the search for comparisons they fall back on movie-memories of New York.

★

So to some it is just a skyscraper; to others it is still unfinished ("although they 'ave taken the scaffolding away"); to all of them it is something strange and vaguely disturbing. But it has no message for them, and nobody notices how mean and fussy some of its neighbours have become by comparison. "Silly, building it of that white stuff—won't look so posh in a year or two!" So far does imagination take them; but the majority is too absorbed in that urgent matter of personal taste, inevitably raised by the contemplation of Mr. Epstein's work, to have any thought to spare for the easy simplicity of the building.

★

The new extension of Olympia is easier to consider, and it comes in for occasional references at the bus stop opposite its western end. It has been likened to "a canvas-covered trunk," but apart from that I have surprised no spontaneous criticism concerning its æsthetic merit. Evidently that unruffled exterior is disquieting, and people want to know why there aren't more windows. They resent what they don't understand, and, so far from soothing them, these restful expanses of stone and concrete set them worrying and pecking at details to find errors wherewith to give substance to the instinctive protest of a conservative race against something new. What beauty the new thing may possess is unobserved. What the public wants is what it's used to: Corinthian columns and the Crystal Palace, and "a little bit of Toodor for the 'ome."

MR. LANSBURY AND HADRIAN'S WALL

Mr. Lansbury proves as commonsensical over the Hadrian's Wall scare as in his attitude towards the amenities of the London parks. He realizes that the advice of enthusiastic antiquarians is to be listened to with great attention, but followed with caution. For, as Mr. Lansbury remarked, there are some seventy miles of Hadrian's Wall, and quarrying is a native industry in those wild parts. It is questionable whether there would have been any questions asked had there been no wall to endanger, and yet the wall is but a line of shadow across a fine, strong landscape, and it is the landscape that goes.

★

As I have said before, there are china-clay mines on Bodmin Moor that to some people spoil the severity of that lonely place, while others find the great cones of white clay, standing very strangely among the brown, stimulating and majestic. I think we may trust Mr. Lansbury.

ASTRAGAL

No. 26 BRUTON STREET, MAYFAIR

DESIGNED BY P. E. PALMER

THE hiring out of really first-class cars to be driven by the hirers themselves is a modern idea, and for the type of room to house the executive of a business of this nature there is no precedent. Here everything possible has been done to simplify the matter for the prospective client and, incidentally, for the members of the staff who, in rotation as he passes from desk to desk down the room, will deal with him.

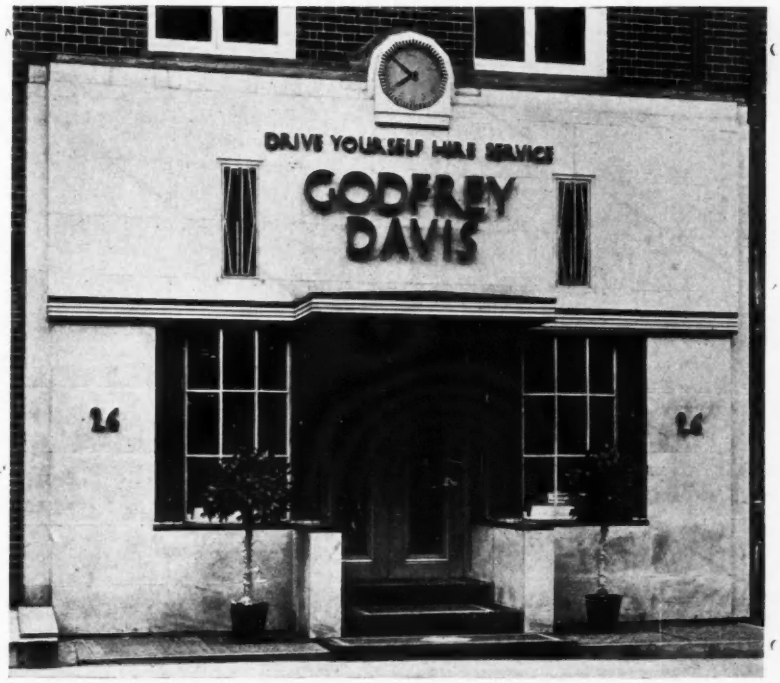
Externally, an attempt has been made to give a strong and clean interpretation of the needs of a modern business, while at the same time paying some deference to the traditions of the neighbourhood in which the premises happen to be situated. The facing is a warm biscuit-coloured marble from France, known as Rochambeau, while emphasis is supplied by the use of Belgian black. Windows and doors, air-extract grilles and the sides of the large letters are finished green. The small letters and numerals are finished in black cellulose, with central ribs, at right angles to their faces, in silver. The large letters are separately lit with lengths of green neon tubing, and the clock face also is illuminated.

Internally, the modelling of the side walls into equal bays, which will perhaps be better understood from the drawings, is an attempt to mask several existing brick piers, carrying joists over, or encasing stanchions placed at irregular intervals. Each desk has its own "bay" which, while giving a sense of individuality, does not destroy the "one-room" motive, a treatment decided upon as more economical as far as heating, ventilation, lighting and cleaning are concerned, and better for purposes of supervision and co-operation in working.

An interesting feature of the room is the small font-like casing which contains a press-button drinking-water fountain.

The walls are finished in pale green and silver, while the desks are in silver with green nosings and black skirtings. The highly polished black ceiling gives considerable apparent height to what is, for its length, a comparatively low room, while the sunk and silvered panels above the specially designed lighting units add to the illusion. Walls, desks, all woodwork and metal and also the ceiling have been finished in cellulose enamel, sprayed.

Between the lighting bowls are a series of flat rectangles. These are the heating units, and no taps, pipes or dust-collecting radiators are anywhere used.



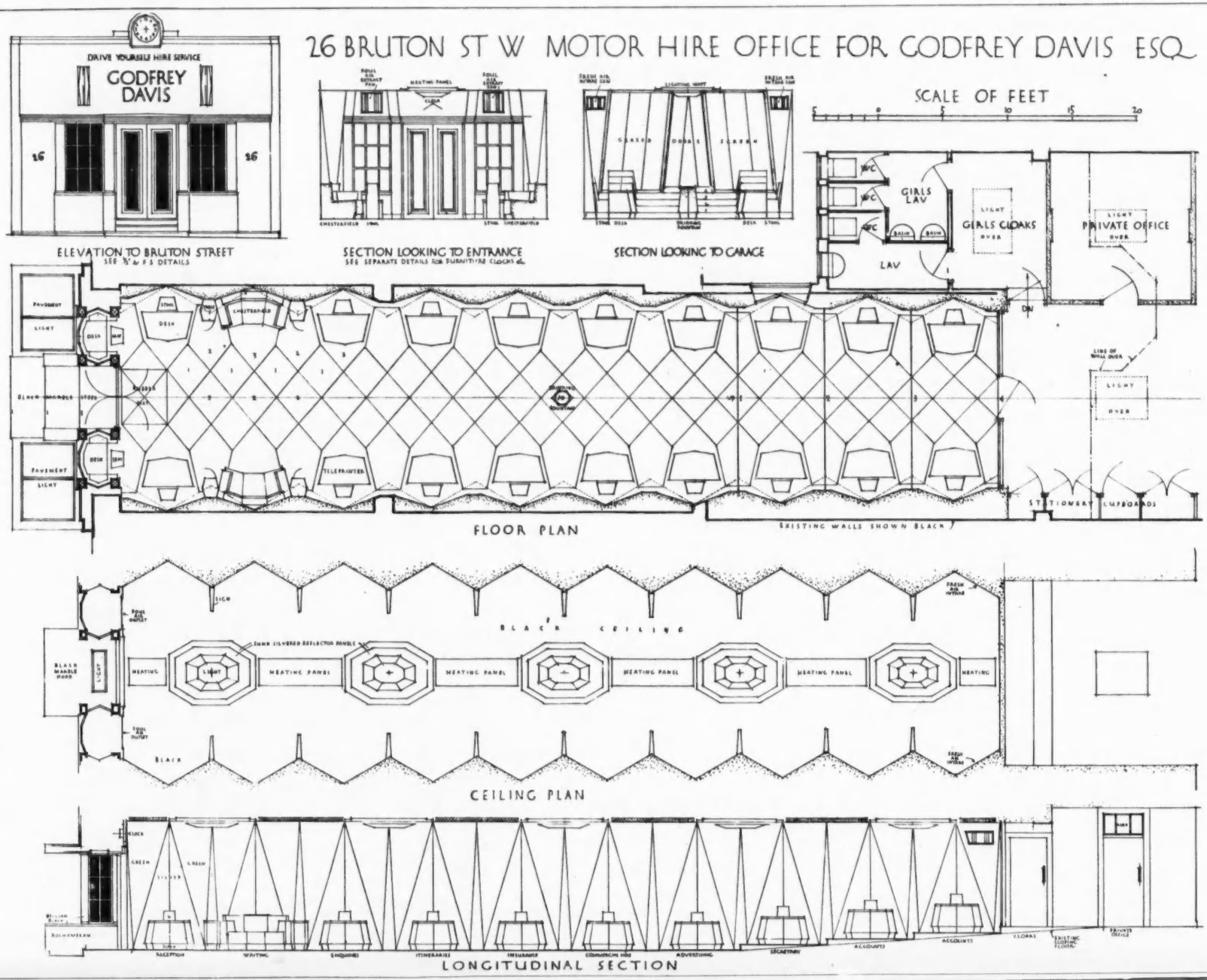
The entrance doorway has a hood and steps of Belgian black marble; the front generally is of Rochambeau, a warm biscuit-colour marble. Doors, grilles and windows are in green. While the larger lettering is in green and silver, neon-lit after dark, the smaller is in black and silver. The clock-face reads "anti-clockwise."



[*Photography by Howard Coster.*

The entrance, or "reception" end of the office, showing the ample chesterfields in pale green hide, and other accommodation for waiting clients, finished in a colour scheme of green, silver and black. The clock is in silver and black, to symbolize Day and Night; the door handles are designed as G D, the initials of the firm.

26 BRUTON ST W MOTOR HIRE OFFICE FOR GODFREY DAVIS ESQ



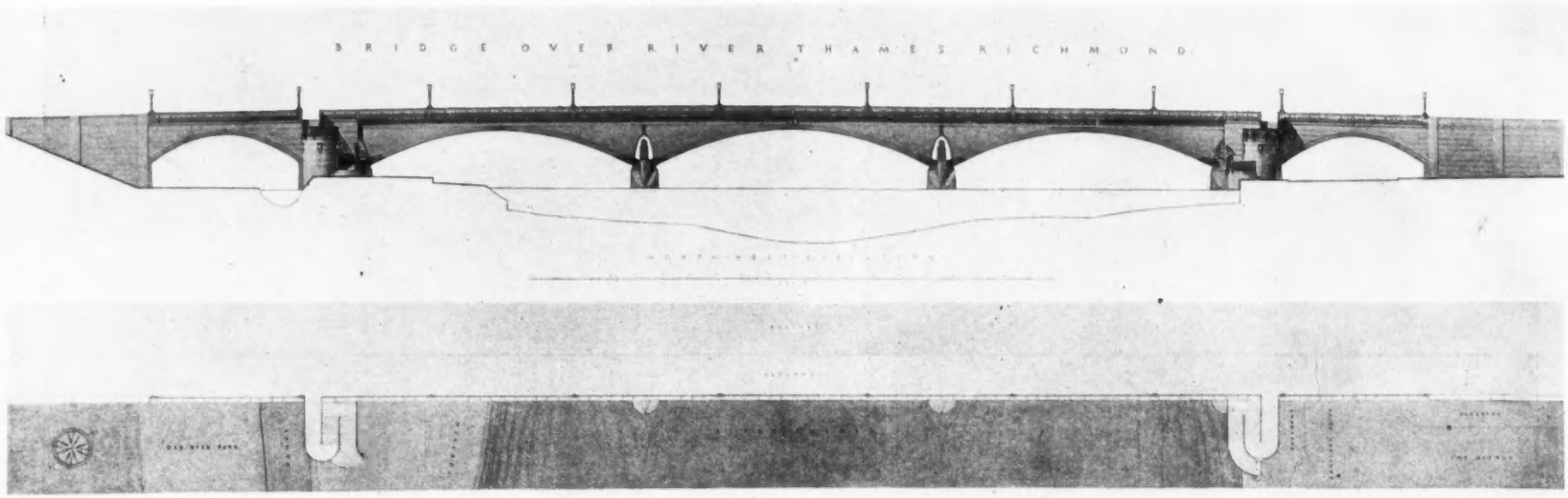
LONGITUDINAL SECTION



No. 26 Bruton Street, W.]

[*By P. E. Palmer* (*photography by Howard Coster*).

The architect's drawings of the entrance exterior, and of the interior in plans and sections; and a general view of the office, looking towards the entrance through the screen separating it from the car park. The steps in the foreground were devised to hide the rake in the existing floor, but also give a sense of distance on entering through the doors at the far end. The flooring lozenges are in black, grey and white, the desks in silver with green nosings, black skirtings and grey tops, and the central drinking fountain is in green and silver, to match the walls, beneath a black ceiling.



RICHMOND'S NEW CONCRETE BRIDGE: ELEVATION AND HALF PLAN

(A. Dryland, County Engineer, Middlesex; Maxwell Ayrton, Architect.)

The new bridge over the Thames at Richmond is to be constructed entirely in reinforced concrete and is of the hinged type. The coving below the balustrade is designed to be inset with semicircular red tiles, set in the concrete during operations. Horizontal bands of roof tiles, showing approximately 1½ inches on the face, are laid flat in the approach walls and staircase walls at the top of each "lift," the chief idea being to overcome any irregularity in the finish of the concrete as it is poured in. The aggregate will be Thames ballast, and the whole of the exposed surface, including the tiles, will be bush hammered. The balustrades and lamps are in bronze.

The original of this drawing is to be exhibited at the Whitechapel Art Galleries in the forthcoming exhibition of pictures of Thames bridges. The model of a portion of the bridge is exhibited in the Royal Academy this year.

On page 688 of this issue of THE ARCHITECTS' JOURNAL *will be found views of some early bridges on the upper reaches of the Thames, affording interesting comparisons.*



A view of the garden side from the tennis courts, showing the skilful manner in which the sloping site has been laid out.

AN ARCHITECT'S HOUSE AT SINGAPORE

DESIGNED BY H. C. ATKIN BERRY (SWAN AND MACLAREN)

THE climate of Singapore is always humid and usually very hot. Hardly any seasonal change is to be observed, and the prevalent dampness causes the heat to be more oppressive than are higher temperatures in drier climates. Therefore, from perusal of the photographs of Mr. Atkin Berry's own house in Dalvey Road, Singapore, it will be observed that one of the predominant features of the design has been the supply of the maximum amount of ventilation. Wherever possible the architect has planned louvres, notably over doors and below the upper floor lounge windows.

The house stands on an open site and is executed in brick and roughcast.

The ground-floor accommodation comprises a small hall, lounge hall, dining-room, bedroom, study, servery, store, bathroom, two verandas and a loggia.

On the upper floor are the lounge—the principal room in the house—two bedrooms, three bathrooms, two dressing-rooms, a linen room, and two verandas, planned above those on the ground floor. Above the beds in the bedrooms is framework, supported by chains hanging from the ceiling, from which mosquito netting is suspended and drawn tightly round the beds. Electric fans are fixed in the ceilings in every room.

The house contains three staircases. The main staircase, leading up to the lounge on the first floor, is situated in the lounge hall, whilst the other two have open landings overlooking the entrance courtyard, both accessible through doors on either side of the main entrance.

It will be noted from the plan on page 678 that no servants are housed in the main building, due to the practice of isolating the servants' quarters from that of the householder, customary in the tropics. These servants, or "boys" as they are usually termed (although some of them may be over forty years of age!), are accommodated in a wing on the right of the main front and connected to the house by a covered way. This wing is one story high and contains three living-rooms, kitchen, pantry, bathroom, and a veranda.

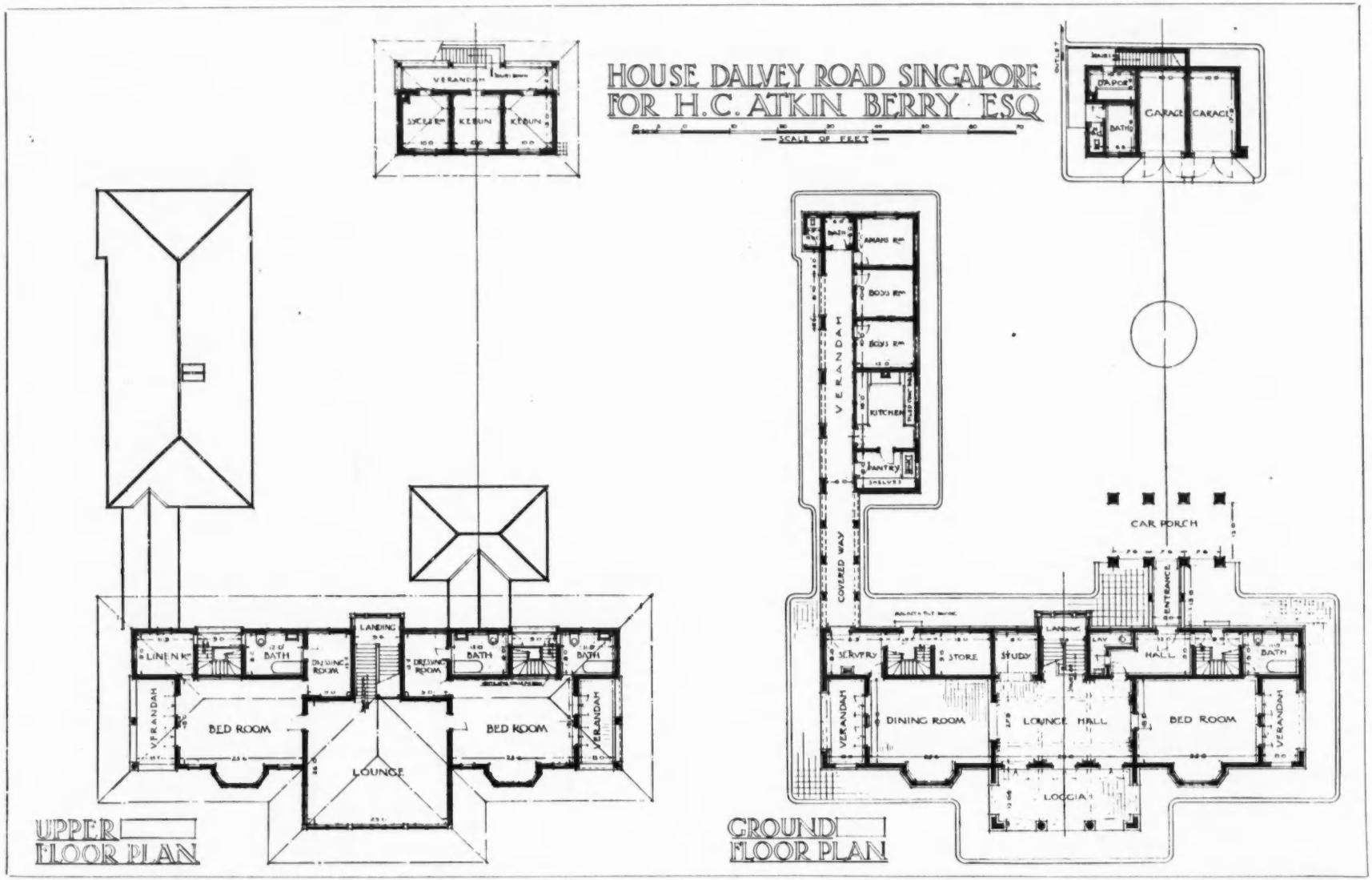
The garage stands on a site in close proximity to the entrance to the grounds. Above the garage is a self-contained flat for the chauffeur, which is reached by stairs at the rear of the garage.

Surrounding the house is malacca-tiled paving, containing a drain-water gulley, so designed that during torrential downpours the rain will fall direct from the overhanging eaves on to the paving and rapidly drain off into the ground. If, of course, the usual method of rain-water pipes had been employed, they would quickly have been flooded by the tropical downfall.

The ravages of the white ant make short work of woodwork, so that the house is floored with tiles throughout, thus preventing any wood being used near the ground. Even the bottom step of the staircase is of marble.

The four bathrooms are well equipped in an up-to-date manner and include water-closets, hand wash-basins and a shower spray. The bathrooms are a great asset to the household, due to the fact that the occupants bathe two or three times daily. Until a few years ago fitted baths were a rarity in the district. The substitute provided was a room with tiled flooring, in which the bather stood and poured water, from out of ewers, over his head, the water running out through gulleys in the floor.

The open nature of the house can be gauged by the fact that it is possible to obtain a direct view through it from one veranda to the other, on the ground floor. It stands in the midst of very beautiful country, thickly wooded in places, of which every room affords a striking prospect.

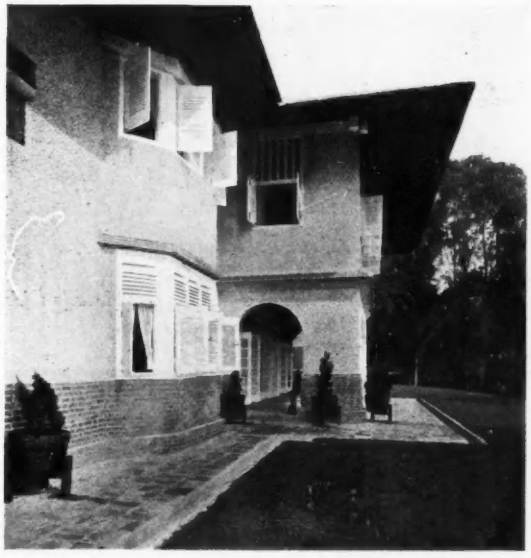


Architect's House at Singapore.] [*By H. C. Atkin Berry.*

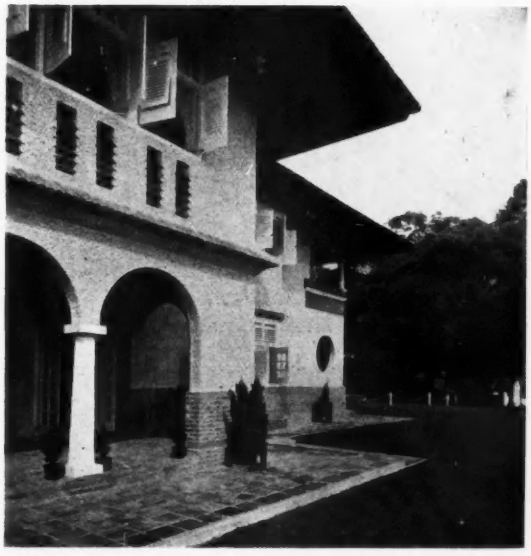
Plans of the ground and upper floors, the garage and chauffeur's flat. On the ground floor the accommodation comprises a small hall, lounge hall, dining-room, bedroom, study, bathroom and a loggia, the latter practically part of the lounge hall. Servants are accommodated in the one-story wing on the right of the main front, to which it is connected by a covered way. This isolates the servants' quarters from those of the householder. The principal room on the upper floor is the lounge, which affords a fine view of the surrounding district.



The entrance courtyard, showing the main entrance beneath the covered car porch, and the servants' quarters, which are provided in the one-story wing on the right of the illustration. The walls are of brick and roughcast.



A detail of the garden front and terrace, looking towards the doors of the loggia giving direct access to the lounge hall.



A half view of the garden side of the house, showing the ventilation system planned beneath the upper lounge windows.



Architect's House at Singapore.] [*By H. C. Atkin Berry.*

This view of the side elevation, with the main entrance covered-car approach to the right and the garden side to the left, illustrates two of the four verandas, planned one above the other, at both ends of the house.



From the loggia magnificent views are obtained of the surrounding hills. It is floored with tiles, having exceptionally wide jointing, about an inch thick. The pillars are of concrete. On the left are seen the tennis courts.



Architect's House at Singapore.] [*By H. C. Atkin Berry.*

Looking from the lounge hall, through the dining-room, on to one of the four verandas. The ground floor of the house is covered throughout with tiles, to avoid the ravages of the white ant. As will be seen from the plan on page 678, it is possible to obtain a direct view through the house from one end to the other.



The lounge hall, looking towards the staircase landing, which is planned in the centre of the main elevation. The bottom step of the staircase is of marble. The alcove on the left of the illustration is used as the study.



Architect's House at Singapore. [*By H. C. Atkin Berry.*

The lounge on the first floor is the principal and largest room in the house. It is situated immediately above the lounge hall and loggia, and overlooks the garden. A view of the exterior louvres of the ventilation system, below the window openings, is to be seen on page 679.



Another view of the lounge on the first floor, showing the head of the staircase. The black dado rail is of teak, as also is the floor. The door shown gives on to the bedroom on the upper floor, which is illustrated below.



Architect's House at Singapore.] [*By H. C. Atkin Berry.*

One of the two bedrooms on the upper floor, looking into the lounge. The door on the right leads to a small dressing-room, giving access to one of the two adjoining bathrooms. Above the bed is the framework for mosquito netting, and in the ceiling are electric fans.

FURNITURE SHOWROOMS: LORD ST., LIVERPOOL

DESIGNED BY

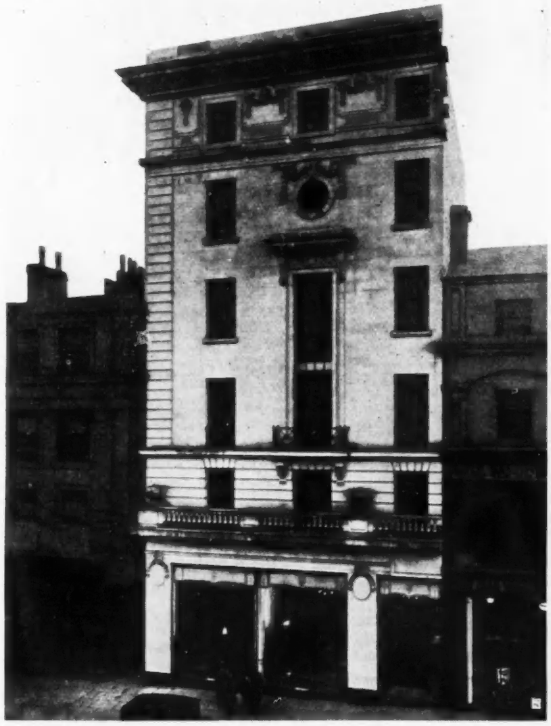
LEWIS SOLOMON AND SON

ON this and the following pages are illustrated a photograph of the first section of the new showrooms for Messrs. James Woodhouse and Son, now completed, and the architects' drawings of the premises as they will appear when the second and final portion is erected. This firm of house furnishers originally occupied numbers 44 and 46 Lord Street, but owing to expansion of business these premises became inadequate, and they acquired the freehold of the adjacent buildings, numbers 48 and 50.

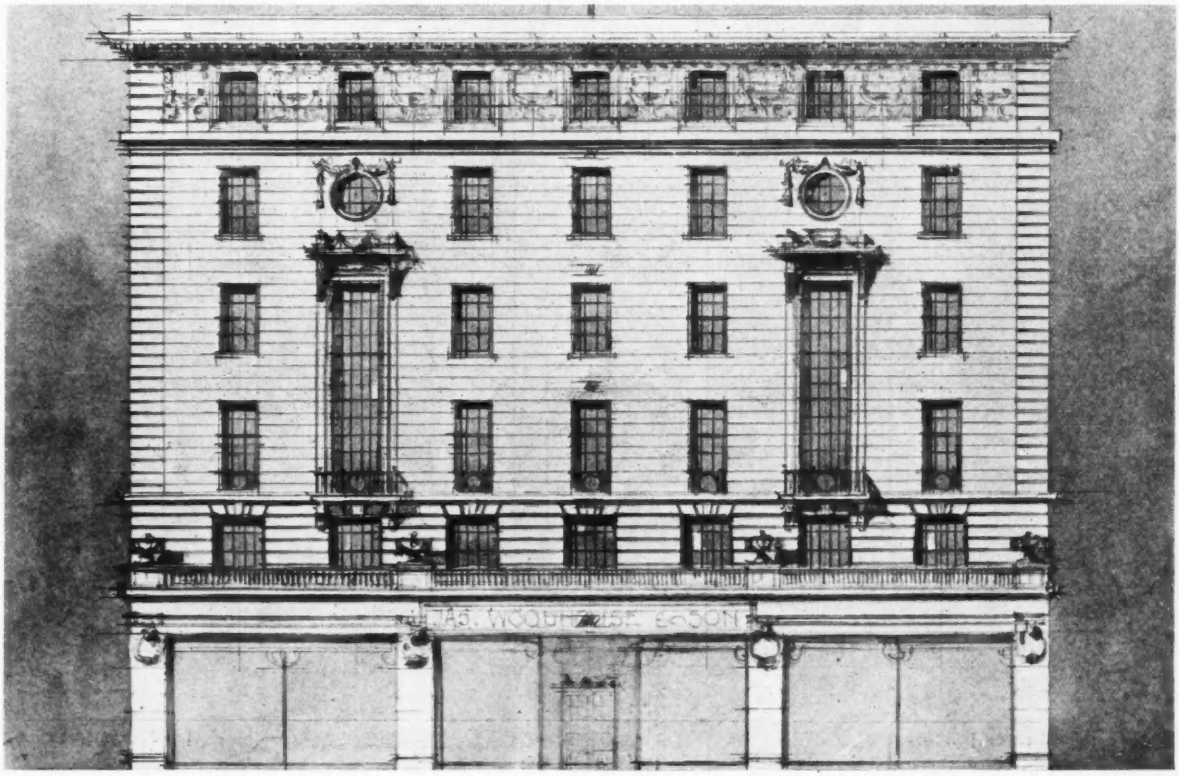
Designs were thereupon prepared by Messrs. Lewis Solomon and Son, FF.R.I.B.A., of London, for the erection of a new building to cover the whole of the site occupied by the existing premises of the firm and those on the adjacent property they had acquired.

For the present, numbers 48 and 50 only have been rebuilt, so that the firm can transfer their business to the new building while the erection of the remainder is proceeding.

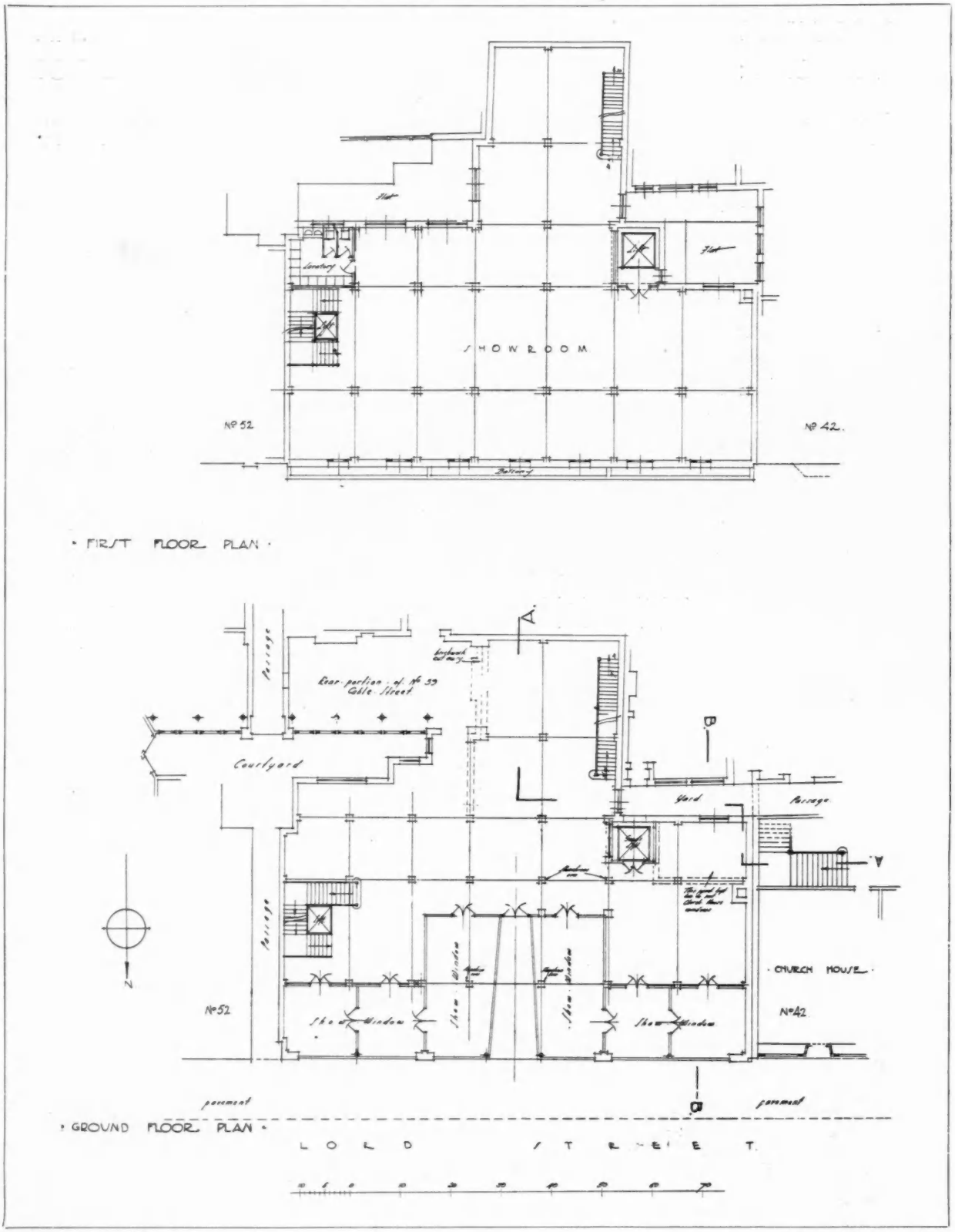
The new building is designed as a steel-frame structure, with fire-resisting floors, a Portland stone façade to Lord Street, and a shop-front of bronze, with panelled enclosures. It consists of basement, ground, and five floors above. All floors are served by a high-speed electric passenger lift, travelling in the centre of the stair well. The staircase is of oak throughout. Messrs. E. Kirby and Sons, of Liverpool, acted as local supervising architects.



This photograph of the first section, now complete, of the new front should be compared with the architects' drawing reproduced below.



The architects' elevational drawing of the main façade, as it will appear when the second and final section is erected. The exterior is faced with Portland stone, and the shop front is of bronze with panelled enclosures.



Furniture Showrooms, Liverpool.] [*By Lewis Solomon and Son.*

The ground- and first-floor plans of the complete scheme. The first section has been built and extends from the left-hand side of the Lord Street front to the centre of the third show window. It is six stories high and also contains a basement.



ENGLISH PRECEDENT No. 113

LANSDOWN CRESCENT, BATH

Lansdown Crescent is one of the later developments of Bath, sitting high above the Royal Crescent and approached from the centre of the town by the steepest of hills. It is by Baldwin, an architect who succeeded the brothers Wood in much of the finest work in the town.

Its fine curve, falling away at each end in stepped terraces, its exquisite refinement of detail, and its situation among trees that do not appear in this photograph, give it a charm that is lacking in the severer work on the lower slopes.

The advent of motor cars has made the Crescent once more accessible, so that the fine houses are now occupied as they should be.

—[E. MAXWELL FRY]

[*This illustration is a companion to that of Royal Crescent, Bath, reproduced as English Precedent No. 100, in the issue for January 29, 1930.*]

THAMES AND MEDWAY BRIDGES

BY E. JERVOISE

Astragal had some comments, last week, on methods of widening medieval bridges to meet the demands of modern traffic, and photographs were given on another page of rural structures of the kind in Somerset and Dorset. Overleaf are illustrated some ancient Thames and Medway bridges to which the following historical notes apply.

DURING the past century numbers of fine old bridges were swept away, and it is only of recent years that it has been possible to organize public opinion when the destruction of a bridge is threatened. County surveyors are now far more inclined to retain the old structures than formerly, as can be seen by the number of bypass bridges recently built. In addition to saving the old bridge, the bypass, if not crossing too close alongside, frequently gives a fine view of it.

Unfortunately, little historical evidence is available about the actual building of bridges in medieval times; it was not until the seventeenth century that the custom started of inscribing on bridges the dates of their erection. A fair number of bridges are mentioned in the Patent Rolls of the Middle Ages, usually in cases where the bridge was described as "decayed" and when the onus of the repair could not be placed. Many inquiries are on record when the verdict was that "no one is responsible for the repair of the bridge"; and often what was known as a "Grant of Pontage" was issued by the King, authorizing the collection of tolls on goods passing over and sometimes under the bridge. After the sixteenth century the matter was dealt with by the Quarter Sessions.

Few medieval bridges remain over the River Thames, the only unspoilt examples being Radcot and New Bridges, both above Oxford. The two pointed arches of Radcot Bridge may date from the fourteenth century. Each of these bridges has ribs under the vault, a type of construction not often employed after the sixteenth century, but comparatively common during the preceding one. It is thought that the ribs were built to save centering material, and that when they were completed the arch proper was built upon them; they were then sometimes removed, their purpose having been served.

The middle arch of Radcot Bridge is certainly of later date, and may have been rebuilt to give more headroom for river-borne traffic. Several grants of pontage for this bridge were issued during the fourteenth century.

New Bridge was probably built later, and if so, this would explain its name. It carries the road from Kingston Bagpuize to Standlake and is no doubt the same bridge as was seen by Leland, the first official archæologist, who made an itinerary of England during the reign of King Henry VIII. All the arches are pointed in shape, and originally they had ribs. Only two still retain them, but signs of ribs are visible in the other arches. New Bridge is fifteen feet wide, as measured between the parapets; the width of Radcot Bridge is three feet less.

Abingdon Bridge was built during the fifteenth century, and in this case there are contemporary records about its construction. Part has recently been rebuilt, as the navigation arch built early in the nineteenth century was found to be giving way. The section of the bridge between the island and the town of Abingdon still retains its seven "four centred" arches. These also have ribs, and this is the part of the bridge which was widened on the upstream side early in the nineteenth century.

About a mile or so from Abingdon is another fifteenth-century bridge, over a cut known as the Backwater. This was threatened a few years ago, but has been saved by the building of a bypass.

The only other bridge over the Thames with claims to medieval features is that at Wallingford. Here, although the present arches over the river were only built early in the nineteenth century, several of the land arches on the Oxfordshire side were built during the fourteenth century; they are pointed and have ribs.

Below Reading none of the bridges is earlier than the eighteenth century. A number of stone bridges of that period remain; the only brick one is Sonning, a delightful specimen of late-eighteenth-century bridge-building.

Quite a number of medieval bridges still remain over the River Medway, and they represent many styles of construction. East Farleigh Bridge, about three miles above Maidstone, is a perfect example of the type built with ribs inside the arches. This feature is absent in the bridge at Aylesford, only seven miles farther downstream, although both have pointed arches. They probably date from the fourteenth century, although the lofty navigation arch in Aylesford Bridge is of later date.

A third type is seen in Twyford Bridge, which crosses at the junction of the Medway and the Teise.

CORRESPONDENCE

FREE ADVERTISEMENT INSERTIONS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I do not doubt that you will have a very large number of grateful letters from architectural assistants expressing their appreciation of the helpful and understanding attitude of their problems revealed in your leading article in the JOURNAL for April 16.

But as many men mean to write and allow their good intentions to be overlooked, I send you this letter as I feel you have solved a very real problem by offering to print the announcements of needs in your paper free of cost to both assistants and architects.

I would thank you, too, for the dignity of your remarks in respect of the position of assistants. It is one thing to understand difficulties; it is another thing to be able to express one's mind about them, and to make a valuable and practical offer of help for their solution without any hint or suggestion of patronage.

Unless I misread your offer, I presume your paper is willing to publish announcements from men who are in "jobs" but who wish to "feel" the market to see if they can find something better, as well as advertisements when men *have* to find a new position. If this is so, I am sure you will remedy a very real difficulty and be of the utmost use.

Architects need, at certain times, an assistant with some particular kind of experience, or one who has had previous work in some special branch of building design.

If this advantage is offered in your scheme, possibly a note might be written to answer the point, as I know several assistants who fancy they would be taking an unfair advantage of your generosity if they used its columns for such purposes as I describe.

I think possibly the only thing I can add to this letter is a single "Thank you." You are doing a great thing for a large body of men by your enlightened policy. GRATEFUL

[We welcome the opportunity of answering our correspondent's query in the affirmative. It is certainly intended that the offer should be equally open to those desiring to improve their present positions, as well as those out of employment.—ED. *A.J.*]

THREE ANCIENT BRIDGES OVER THE RIVER THAMES



The bridges illustrated on these two pages are the sequel to material published in last week's issue. This is Sonning Bridge, below Reading, a delightful example of eighteenth-century brickwork.

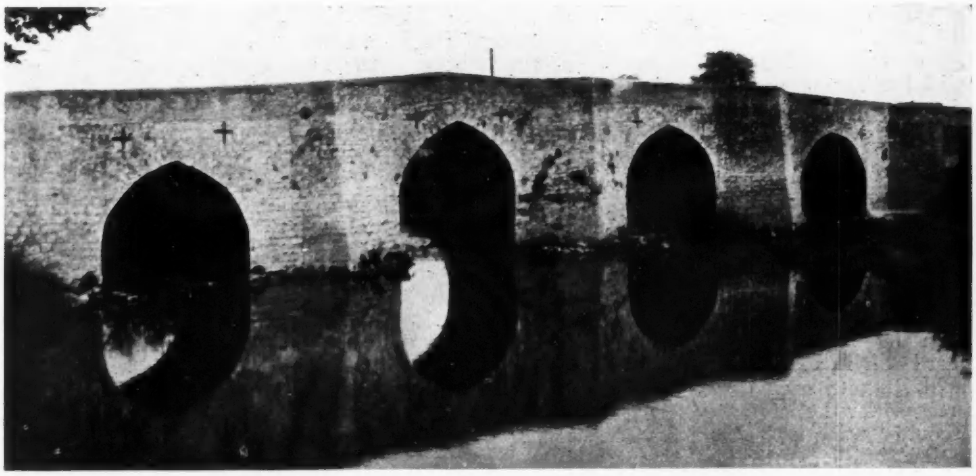


An unspoilt medieval Thames bridge : Radcot Bridge, from downstream. The ribs under the vaults merely served a constructional purpose, but in this case remain. (Photo. : E. H. Binney.)

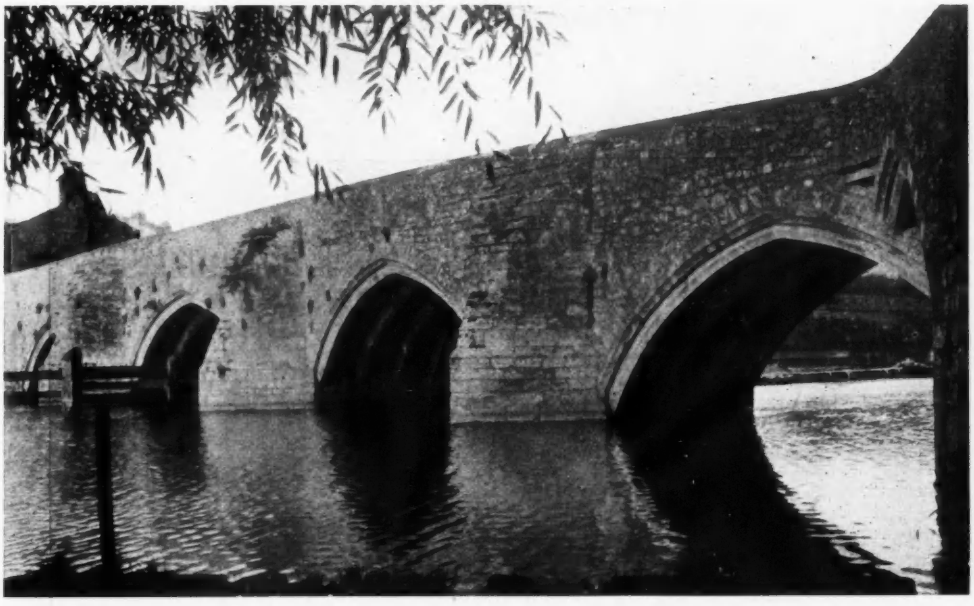


New Bridge, nine miles from Oxford—here taken from the northern bank on the upstream side—dates from about A.D. 1300. Two of the arches retain ribs. (Photo. : E. H. Binney.)

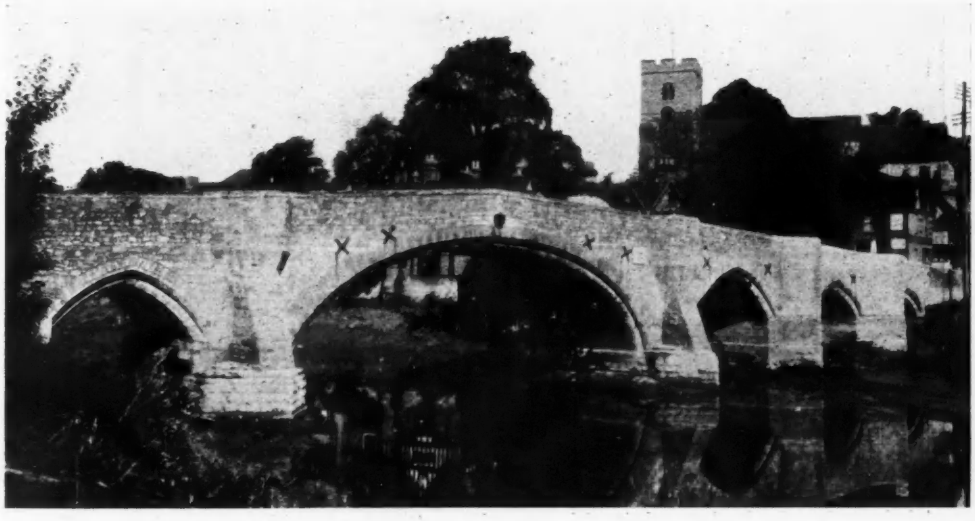
THREE ANCIENT BRIDGES OVER THE RIVER MEDWAY



Twyford Bridge, Kent, which spans the Medway at its junction with the Teise, is one of several medieval examples still remaining in their original condition in this part of the county.



At East Farleigh, about three miles upstream from Maidstone, this Kentish bridge shows very clearly the ribs within the arches, characteristic of medieval constructional methods.



The bridge at Aylesford, only seven miles away, downstream, however, shows no sign of ribs under the fourteenth century pointed arches. The lofty navigation arch is of later date.

INTERIOR DECORATION

The Work of Modern English Artists

THE May number of *The Architectural Review* is a special issue devoted entirely to modern English interior decoration. It is a big achievement, a production of rare value, and a direct challenge to the great English furnishing houses who consider it might be difficult to sell the work of "artists of repute."

In a leading article entitled "Give the Public What it Wants" the Editor points out that the special issue is the result of three advertisements of Harrods in a Sunday newspaper, written by no lesser authors than Bernard Shaw, H. G. Wells and Arnold Bennett, each of whom gave his reasons for declining the offer that he should "write up" Harrods. The firm had justified their invitation by the claim that as they employed the best artists, designers, architects and craftsmen, so also they needed the finest writers to make known their wares to the world.

The Architectural Review asked very pertinently: Who were these living artists and designers, and why, instead of the work of living English artists, the rooms of Harrods were full of reproductions? The reply of Harrods was a familiar one—that it was not the business of the big store to create taste, but to meet a demand, etc. And later on their architect admitted that it might be difficult to sell the work of "artists of repute." The *Review* thereupon approached the other great English furnishing houses and found that Harrod's architect was merely voicing the general commercial opinion of England.

The special issue provides a valuable record of living English artists and their achievements in decoration. It is profusely illustrated with the best work, and contains nine plates devoted to decorative schemes by Duncan Grant, Marion Dorn, Lord Gerald Wellesley and Trenwith Wills, Evelyn Wyld, Raymond McGrath, Easton and Robertson, Edward Bawden, and Boris Anrep.

Among the literary contributions are "three views"—I. "The Man of the World," by the late Sir Lawrence Weaver; II. "The Artist," by John Gloag; III. "The Man in the Street," by A. E. Blake. Other articles of outstanding interest are "1830–1930—Still Going Strong: A Grown-up's Guide to the Recent History of Interior Decoration," by John Betjeman; "New Materials—New Methods," by Raymond McGrath; and "Electric," by Raymond Mortimer.

The *pièce de résistance* of the issue is the competition for the decoration and furnishing of a dining-room and a living-room. The Editor of *The Architectural Review* offers a first prize of £100, a second prize of £50, and a third prize of £25 for the three best schemes submitted to him by August 1, 1930. The competition is open to any architect, decorator or artist of British nationality or living in the British Isles. The conditions of the competition are published in the issue and it is stated that the winning design will be carried out and put on exhibition at Messrs. Waring and Gillow's.

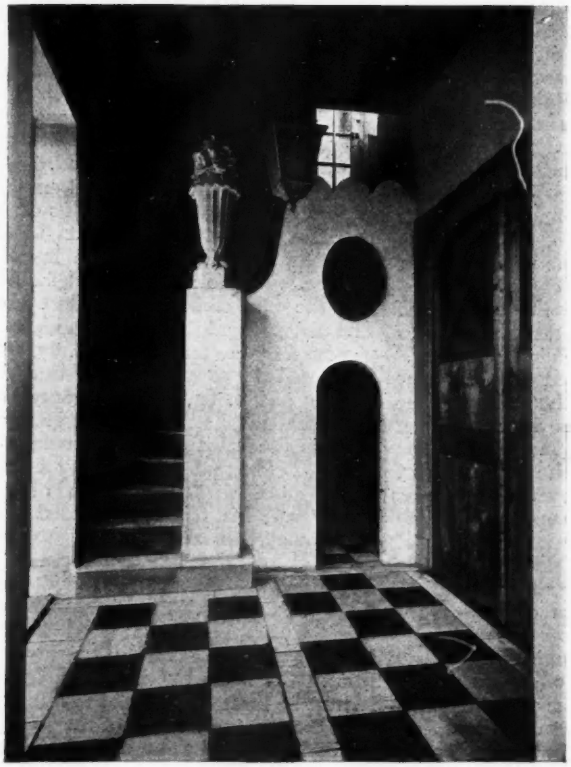


[*From* The Architectural Review, *May, 1930.*

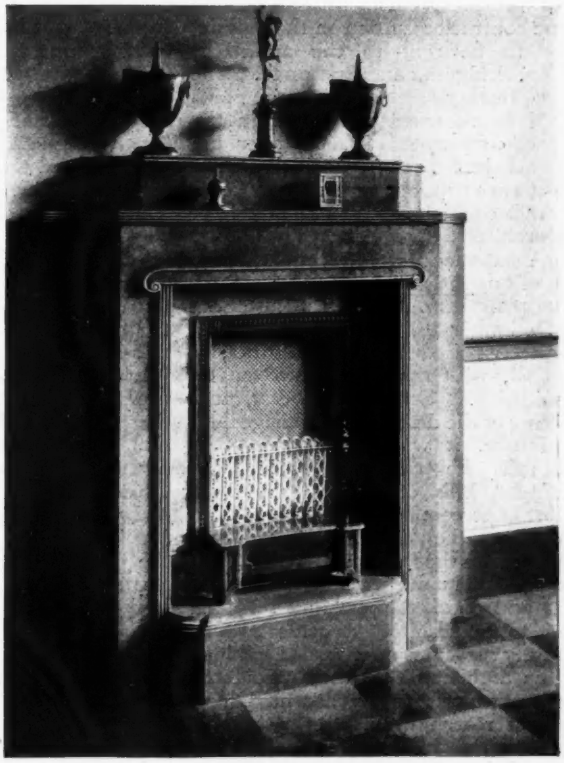
A bedroom in a London house, designed by Guy Elwes. The floor is a black composition with silver inlay. The walls are covered with a Persian blue-green and black waxed wallpaper. The curtains are sulphur yellow. The lighting for the room is concealed behind the pillars.



A corner of the Bridal Suite at Grosvenor House, London, designed by Oliver Hill. The furniture is in sycamore and the mirror glass is grey. The colour-scheme is white and silver.



A staircase leading to the studio of Mr. Clough Williams-Ellis, at Romney House, Hampstead. The staircase is built in marble and white stucco against a blue background. The doors are of plain pine. The vase is of white cast stone.



[*From* The Architectural Review, *May, 1930.*

A gas fire in the garden room of No. 9 Lansdown Crescent, Bath, designed by Adams, Thompson and Fry. The surround is of wood, painted with a slightly uneven patina. The recess is lined with light Sienna marble.

LAW REPORTS

ARCHITECTS AND BILLS OF QUANTITIES: RIGHT TO OPEN

Willcocks and Barnes v. *Paignton Co-operative Society, Ltd. King's Bench Division. Before the Lord Chief Justice.*

LORD HEWART, the Lord Chief Justice, delivered his reserved judgment in an action he tried at the Exeter Assizes, in which the plaintiffs, Messrs. Willcocks and Barnes, builders, sued the Paignton Co-operative Society, Ltd., for damages for alleged breach of contract.

The Lord Chief Justice, in his judgment, said the plaintiffs' claim was for damages for breach of contract to employ them to carry out certain works at Paignton. The plaintiffs were builders and contractors, and in November, 1928, the defendants invited tenders by advertisement for the erection of certain premises stating that applications for bills of quantities should reach the defendants' office not later than December 4, 1928. Towards the end of November the plaintiffs duly applied for bills of quantities, which were sent them on December 6, and which were accompanied by a letter stating that sealed and endorsed tenders were to be delivered to the defendants not later than 5 p.m. on December 18 and that the priced bills of quantities, in a separate sealed cover with the name of the contractor written on the outside, were to be sent to the architects, Messrs. Bridgman and Bridgman. The letter further stated that the bills would be returned unopened, in the case of unaccepted tenders, after the contract had been signed, and that plans, specifications and conditions of contract could be seen at the office of the architects during the usual hours. These statements were repeated in the bills of quantities.

The plaintiffs duly delivered a tender on December 18, and delivered to the architects priced bills of quantities, as directed, with their name written on the outside. On the same day, at a meeting of the defendants' management committee, it was resolved that the architects be asked to verify the plaintiffs' bills of quantities and to report thereon. Acting on that resolution the defendants' quantity surveyors on the following day obtained the bills of quantities from the architects and checked them and returned them to the architects as correct. The quantity surveyors afterwards explained to the architects that they considered the tender was to be accepted, and for that reason obtained the bills of quantities from the architects and checked them.

There was a special meeting of the defendants' management committee on December 22, and it was resolved that the architects be asked to include in their verification of bills of quantities those relating to the lowest tender, that of Messrs. Melhuish and Berry, and to consider the matter again on December 28. At that special meeting the tender of Messrs. Melhuish and Berry was accepted.

On January 2, 1929, Mr. Barnes, a partner in the plaintiffs' firm, called at the architects' office and saw Mr. Bridgman. On this point he accepted the evidence of Mr. Barnes as to what took place at the interview, viz., that plaintiffs' tender was to be accepted by the committee, that the bills of quantities were checked and found to be correct, that the committee afterwards accepted another firm's tender, and handed the witness back his bills of quantities opened. Mr. Barnes said he did not think this was playing the game and that he should have to consult his partner. Later plaintiffs heard that a contract had been entered into with Messrs. Melhuish and Berry. For the plaintiffs, Mr. du Parcq, K.C., had contended that the opening of their bills of quantities constituted an acceptance by the defendants of their tender, and that the return to them by the architects of the opened bills on January 2, after the bills had been checked and ticked off by the defendants' quantity surveyors, was a signification to the plaintiffs of that acceptance, and that there was therefore a completed contract between the plaintiffs and the defendants. For the defendants, Mr. Croom Johnson, K.C., admitted that what had been done was highly undesirable, and that the bills of quantities ought to have been returned unopened to the plaintiffs. But he submitted that the opening of the bills of quantities did not amount to an acceptance of the plaintiffs' tender.

His lordship regretted that he was unable to agree with the argument for the plaintiffs, who seemed to have been shabbily treated. Even though it be assumed that, when the resolution of the defendants' management committee of December 18 was passed, it was the intention of the defendants to accept the plaintiffs' tender, that he thought was not enough. In such a case an intention to accept an offer was not an acceptance, unless and until the intention was communicated to the person by whom the offer was made; and the returning of the plaintiffs' bills of quantities to them opened on January 2 could not in his lordship's opinion be regarded as the communication of an acceptance, because before they were returned Mr. Bridgman informed Mr. Barnes that the defendants had decided to accept the contract of another builder. There must therefore be judgment for the defendants.

BOUNDARY DISPUTE

Bellis and another v. *Fieldgate. Chancery Division. Before Mr. Justice Clauson.*

This action concerned the rights to a piece of land at the rear of premises in the High Street, Chatham. The plaintiffs were Mr. E. C. Bellis and his three sisters, of New Road, Chatham, and Mr. G. Catchpole, of High Street, Chatham, and they sued Mr. G. H. Fieldgate, of Richmond Road, Gillingham, Kent, for a declaration that a certain piece of freehold land at the rear of 67 High Street, Chatham, premises let to Mr. Catchpole, was their property. The plaintiffs also sought an injunction to restrain the defendant and his tenants from trespassing upon it and an order to remove pegs and any other erections upon the land.

The defendant counter-claimed for a declaration that by virtue of a conveyance dated October 3, 1911, or in the alternative by virtue of the statute of limitations, he was the owner in fee simple of the disputed land. The dispute related to the boundary of the land at the rear of 67 High Street, and plaintiffs did not press for a mandatory injunction in respect of alleged trespass, if they got a declaration that the land belonged to them.

Mr. Morton, K.C., argued the case for the plaintiffs, and Mr. Arnold Jolly for the defendant.

His lordship, in giving judgment, said the question he had to decide was one of title to a small piece of land. Unfortunately the difficulties and expense of ascertaining the precise rights of the parties were not in proportion to the smallness of the area of the land in dispute. In one respect the defendant had the Ordnance map against him. The disputed ground had, he said, been possessed by the tenants of No. 67, who had used it as their own, but the tenants of No. 69, which belonged to the defendant, had without interference been in the habit of passing along the disputed land and going out by a back way. On the construction of the documents, his lordship decided that defendant was not entitled to the disputed land and he granted plaintiffs a declaration that the disputed land belonged to them. His lordship added that he was bound to grant an injunction to protect plaintiffs' rights and title in the land, but if he did do so, it must be limited, so as not to interfere with the right of passage of the persons occupying No. 69 to access by the back way.

Mr. Morton said under those circumstances he did not ask for an injunction.

His lordship granted plaintiffs a declaration that the land belonged to them and gave them the costs of the action. He dismissed the defendant's counter-claim with costs.

CLOSING OF HIGHWAY : COMPENSATION FOR INJURIOUS AFFECTION

Wright v. *President of the Air Council. King's Bench Division. Before the Lord Chief Justice and Justices Avory and Talbot.*

The question at issue in this case was whether a property owner could claim compensation for injurious affection when access by road to his premises and land had been interfered with by the closing of the highway.

The matter came before the Court on an award by an arbitrator under the Acquisition of Land (Assessment and Compensation) Act, 1919, the claimant being Mr. A. G. Wright, of The Cottage, Plough Lane, Purley, near Croydon.

Mr. Giveen, for the Air Council, said the litigation arose out of the reconstruction of Sandy Lane, Wallington, by the Air Ministry. It was turned into a highway now known as Foresters Drive, and a part of Plough Lane that had been a thoroughfare was stopped up. The claimant was the freeholder of a house and land at Plough Lane, and his case was that by the closing of the road the distance from his house to Waddon had been increased, and he was entitled to damages for "injurious affection." The damages were agreed at £100, and that sum had been awarded by an arbitrator, with £25 costs. His clients (the respondents), however, submitted that the claimant had no case in law. The question for the Court was whether there had been the injurious affection alleged which entitled claimant to make his claim under the Land Clauses Act. Counsel contended that this had nothing to do with the Act, as the respondents had taken no land and there was no notice to treat. It was true that claimant had a little farther to walk, but he had a better road to walk on.

Mr. O'Callaghan, for the claimant, argued that the Land Clauses Act automatically incorporated itself into any public Act, such as the Acquisition of Land, etc., Act, and that what had happened here was the result of "works or undertakings" carried out under the latter Act and in accordance with the special Act of the Ministry.

The Court took the view that the stopping up of Plough Lane had interfered with the claimant's access to his premises and was carried out after the acquisition of land. They were of opinion that the claimant was entitled to the compensation of £100 and instructed the arbitrator accordingly.

Mr. Giveen said his clients would pay the claimant's costs without prejudice to their right to refuse to pay costs in other cases.

LITERATURE

PLANNING GREATER LONDON

THIS report may be regarded as the outline sketch of the programme for the development of Greater London, which will take several years, at the very least, to reach even a measure of finality. It is most desirable that such a report should be issued, as this has been, as early as possible, in order to afford a visualization, not only of the extent of the problem, but also of the principles on which possible solutions may be reached.

The subjects which have been regarded as of paramount importance are three in number—the provision of Open Spaces, the treatment of Arterial Roads, and the Administrative requirements. Each of these is dealt with by Mr. Raymond Unwin, the Technical Adviser to the Committee, in three memoranda which form the bulk of the report.

As regards the provision of the vast area required to bring the playing fields and other open spaces up to the standard accepted as adequate to the needs of the population of Greater London, which demand an additional 200 square miles, Mr. Unwin makes a number of very interesting points. First and foremost, the public ought only to have to pay for the agricultural value of the land acquired, as the building value is automatically transferred to other land. It is admitted that the adjustments may present difficulties as between separate owners and separate authorities, but the validity of the general principle is proved up to the hilt.

Then, as a matter of good planning,



Old Highway, with Service Road, promoting freedom for Traffic and Safety for All.

[*From* The First Report of the Greater London Regional Planning Committee.]



New Highway with Frontage Building, masking five Road Junctions.

From The First Report of the Greater London Regional Planning Committee.

it is pointed out how much better the result would be if the land to be developed were regarded as a vast open space from which areas should be chosen as appropriate for building development, rather than as uniformly potential building land out of which open spaces are to be rescued by acquisition. The first of these has not hitherto been visualized by reason of the varying attitude of landowners as regards development, but it is obviously the more natural procedure which would ultimately lead to greater efficiency.

Mr. Unwin's conception of the arterial road is based on that of the American parkway, namely, that it should be an attractively laid-out route so that high-speed travel is possible with safety. It should not, in his view, afford building frontages, for the very good reason that these make rapid travel impossible and waste expensive road surface by reason of its frequent obstruction by standing vehicles. For similar reasons he deprecates frequent side roads, and would so plan that these only entered at long intervals, say at least one-third of a mile apart. Speaking generally, it is obvious that he feels we have still a long way to go before we shall reach efficient town planning on comprehensive lines.

As regards administrative requirements, various proposals are put forward either alternatively or to some extent in combination. The line of action regarded as most likely to be effective is the development of existing town planning powers and authorities, subject to a general co-ordination by means of a statutory regional committee or committees. A special memorandum is appended suggesting appropriate procedure, and the functional divisions between the various types of authority.

Two important appendices deal respectively with the methods of acquiring, planning, and redistributing land in Germany and with the use of special assessments in Kansas City, U.S.A., as a mode of recovering the cost of land allocated as open spaces.

H. V. LANCHESTER

The First Report of the Greater London Regional Planning Committee. Publishers: Knapp, Drewett and Sons, Ltd. Price 5s. net.

SCENIC MODELLING

ONE does not have to walk far along any public thoroughfare to realize the importance of scenic models as a means of attracting the attention of the public to the shop window. Examples include such diverse productions as a model of a ship's cabin, to illustrate its comfortable appointments; a portion of a railway system, such as those employed at big exhibitions by the leading railway companies; or graphic displays that occupy the whole of a large window. There are figures which stimulate a smile, and others which suggest the seduction of the dance; models of busy street scenes imbued with the roar of printing machinery and the insatiable demands of the giant presses, and of settlements which fill the onlooker with the spirit of adventure and the hope of adequate reward for intelligent labour.

Such and many other models, to the number of over a hundred, are illustrated in a practical handbook on the planning, design, and construction of scenic models by Edward W. Hobbs, Vickers gold medallist. The subjects covered vary enormously, as a perusal of the pages will show. Widely divergent also are the methods of construction and treatment, but they have one aim in common—the presentment in an agreeable form of an object, scene, or quality which cannot be achieved so effectively by any other means. The author surveys the whole subject, giving many practical hints on the construction of models of a like character to those illustrated.

Several chapters are devoted to materials, modes of manipulation, the principles of composition and design, based on the experience of the author, gained during thirty years of varied practical work. The art of successful modelling lies in knowing what not to model. The artist conveys with a few lines or splashes of colour an impression of an actual scene and presents it in all the glowing vigour of actuality. In scenic modelling the aim should be much the same, the representation of a scene by implication and suggestion.

Scenic Modelling. By Edward W. Hobbs. Cassell & Co., Ltd. Price 1s. 6d. net.

OBITUARY

VERNON BLAKE: 1875–1930

It is with deep regret that we record the death of Vernon Blake, in a nursing home at Avignon, at the age of fifty-four. We hope to publish, next week, a summary of his career.

JAMES VILLAR: 1843–1930

We regret to record the death of Mr. James Villar, F.S.I., L.R.I.B.A., of Cheltenham, who died recently in his eighty-seventh year.

After leaving school he was articled to the late Mr. D. Humphris, and subsequently, on qualifying, he obtained a position with Messrs. Field and Castle, architects, of Oxford, with whom he remained for some years. Later, returning to Cheltenham, he commenced to practise on his own account, and designed many buildings in the district.

SOCIETIES AND INSTITUTIONS

R.I.B.A. INTERMEDIATE EXAMINATION

The forthcoming R.I.B.A. Intermediate Examination will be held from May 30 to June 5, 1930. The last day for submitting applications to the R.I.B.A. for entrance to the examination is April 30.

SHEFFIELD, SOUTH YORKSHIRE AND DISTRICT SOCIETY OF ARCHITECTS AND SURVEYORS

At the forty-second annual general meeting of the above society, held at Sheffield, the president brought forward the following resolution, which was passed unanimously: "That a junior section of this society be formed in conjunction with a Students' Society of the Department of Architecture, University of Sheffield, for the purpose of the study of architectural design and construction." It was decided that a committee, consisting of Messrs. W. G. Buck, H. B. S. Gibbs, S. Welsh, E. A. Ashburner and one student from the Department of Architecture, with power to add, should act together and make the necessary arrangements for starting such a junior society.

The election of officers for Session 1930–31 resulted as follows: President, Mr. W. G. Buck, F.R.I.B.A.; Vice-president, Mr. J. E. Lancashire, L.R.I.B.A.; Hon. treasurer, Mr. J. R. Wigfull, F.R.I.B.A.; Hon. secretary, Mr. H. B. S. Gibbs, A.R.I.B.A.; Fellows, Messrs. R. Cawkwell, A.R.I.B.A.; J. M. Jenkinson, A.R.I.B.A.; H. I. Potter, A.R.I.B.A.; J. A. Teather, L.R.I.B.A.; J. C. P. Toothill, A.R.I.B.A.; S. Welsh, M.A., B.ARCH., A.R.I.B.A.; Associates, Messrs. H. W. Inott, L.R.I.B.A.; A. M. Lusby, A.R.I.B.A.; F. H. Wrench, L.R.I.B.A.; Provincial members, Messrs. C. F. Moxon (Barnsley); F. H. Bromhead, A.R.I.B.A. (Chesterfield); E. H. Walker, F.R.I.B.A. (Doncaster); Lt.-Col. J. E. Knight (Rotherham).

NORTHERN POLYTECHNIC SPEECH NIGHT

At the annual speech night of the Department of Architecture, Surveying and Building of the Northern Polytechnic, Sir John Gilbert, K.B.E., Chairman of the Education Committee of the L.C.C., distributed the prizes to the successful students and, in the course of his address, referred to the growth of the Northern Polytechnic and to technical education generally throughout London. He said that the London County Council was alive to the value of technical education, which was now the subject of their most serious attention.

THE SKETCH CLUB TO THE RESCUE!

SUCCESS is a mild and colourless word which gives no hint of the jollity that met the first session of the Sketch Club in last week's ARCHITECTS' JOURNAL. *But the jollity is tempered just now with the sadness that becomes the recipient of evil rumours. Yes, evil and sinister rumours have reached the ears of the Sketch Club, and given it pause.*

Members and their friends are perhaps familiar with another and older Exhibition Club, known to its intimates or habitues *as the Royal Academy. For years this Royal Academy has been reluctantly compelled to admit architectural drawings to its show, much to the detriment of other works depicting subjects of inferior interest. This present year there has been issued a decree making the Third Dimension illegal in the architecture room. Drawings of buildings may be shown, but the drawings must be Innocent of Perspective and the buildings must be Devoid of Thickness. The fashionable Euclidean Silhouette must pervade the room. Nothing must Recede or Stand Out; nothing must have more than One Side.*

In 1929 three persons, one man and two women, entered the architecture room during the same week. It is confidently anticipated that the present year the attendance figures will be more reassuring. But rumour (this rumour which has so disturbed our Club) has it that a special guard is further to be posted at the doors of the room to warn off unheeding visitors.

After mature deliberation the Sketch Club has resolved to extend hospitality next week to the Royal Academy exhibitors, whose fate has earned its warmest sympathy. As one member said, speaking amid universal acclamation: "We must be mindful of our duty to the glorious heritage of Englishmen. Port, income-tax, Bernard Shaw—examples of this heritage surround us on every side. How can we well neglect our weaker brethren of the Academy?"

Meanwhile, the Club sending-in days still go on. All will have their turn when the visitors have departed, and our normal routine is resumed. The Club's address is:

c/o The Editor,
THE ARCHITECTS' JOURNAL,
9 Queen Anne's Gate,
Westminster, S.W.1.

COMPETITION CALENDAR

May 16.—Messrs. Ewart and Son, Ltd., in conjunction with the Association of Architects, Surveyors and Technical Assistants, invite designs for a lock-up hangar for an aeroplane. The competition is divided into two classes, for those over and under 25 years of age at midnight, May 15–16, 1930. Assessors: William H Hamlyn, A.R.I.B.A., and Chas. McLachlan, A.R.I.B.A., with A. N. Cathcart as technical adviser with regard to roofing, ventilation and hot-water supply. Two prizes will be awarded in each class, namely, free places in the A.A.S.T.A. party to Madrid in September, including second-class rail and steamboat travel throughout and all hotel expenses, except personal expenses. Messrs. Ewart and Son, Ltd., reserve the right to publish or make use of any of the designs for which a prize is awarded, but do not reserve the right to build in accordance with any of them. Particulars of the competition, etc., are obtainable from A. Seymour Reeves, Secretary, A.A.S.T.A., 26 Buckingham Gate, S.W.1. Latest date for submission of designs: May 16, 1930.

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs: June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor: J. Ernest Franck, F.R.I.B.A. Premiums: £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor: H. V. Ashley, F.R.I.B.A. Premiums: £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs: July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall which is to be built on the site of

the old town hall, at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

July 31.—The Dudley Education Authorities invites architects having an office within a radius of fifteen miles of Dudley to submit competitive designs for a Council school to accommodate 320 children, to be erected on the Brewery Fields estate; also a school for 400 children on the Priory estate. Assessor: Herbert T. Buckland, F.R.I.B.A. Premiums: £150, £100, and £50. Applications for conditions of the competition, etc., should be made to J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley, by April 30. Deposit £1 1s. Latest date for submission of designs: July 31.

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Showrooms for Messrs. Godfrey Davis, 26 Bruton Street, W.1 (pages 673-675). General contractors, Bovis, Ltd. Sub-contractors: Greenway and Ludlow, Ltd., marble work; Korkoid Decorative Floors, Korkoid flooring; Bennet Furnishing Co., desks, stools, tables, chesterfields, etc.; Troughton and Young, Ltd., lighting fittings; Rosser and Russell, Ltd., heating and ventilation; London Spray and Brush Painting Co., Ltd., cellulose paint; Walter Cassey, Ltd., metal letters and grilles.

Furniture showrooms, 44-50 Lord Street, Liverpool (pages 683-684). General contractors, Bovis, Ltd. Clerk of Works, J. Brundrit. Carving by Barry Harris. Sub-contractors: Ragusa Asphalte Paving Co., Ltd., dampcourses and asphalt roof, etc.; stone supplied by Barnes and worked by H. Thornton & Co.; Banister, Walton & Co., Ltd., structural steel; Diespeker & Co., Ltd., floors and encasing; Architectural Timbers, Ltd., wood-block flooring; Young, Austen and Young, central heating; E.P.I., Ltd., electric light fixtures; F. E. Pescod, sanitary fittings; Shapland and Petter, hardwood staircase; John Gibbs & Co., casements; Hart, Son, Peard & Co., Ltd., metalwork; Smith, Major and Stevens, Ltd., lifts; Quiggin Bros., lift enclosure.

Bungalow, at Sandon (pages 698-699). General contractor, John Rayner.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to H.M. Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

11432. Akerman, W. S. Roofing construction. April 10.

11419. Black, W. J., and Chisholm, W. D. Manufacture of floorings, pavings, etc. April 10.

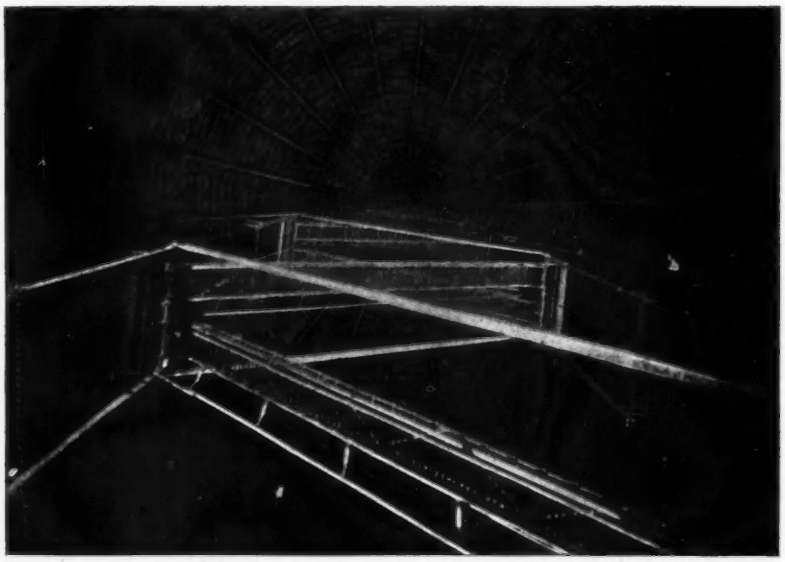
11607. British Steel Piling Co., Ltd., and Hiley, A. Construction of piles or columns. April 11.

11644. Bromhead, F. H. Building-brick. April 12.

11079. Brown, G. N., and Eaton, H. Concrete, etc., flooring. April 8.

ABSTRACT PUBLISHED

325745. Tobias, B. Floor surfacing machines.



The new gasholder at Southall, looking up the interior collapsible staircases. It is more than 300 feet high and holds eight million cubic feet of gas.

TRADE NOTES

The Liverpool Branch of the British Thomson-Houston Company has been transferred from South Castle Street to 27-29 Stanley Street. Telephone: Bank 5700.

A private company has been formed by Messrs. Ruston and Hornsby, Ltd., Lincoln, under the title of Société Anonyme des Moteurs Ruston-Hornsby, 5 Avenue de la République, Paris, to exploit their oil engine business in France and the French colonies.

In a new illustrated booklet on church lighting just published by the Edison Swan Electric Co., Ltd., an important fusion of interests is announced. As a result of arrangements made between the firm and the British Thomson-Houston Co., Ltd., the wiring supplies, lighting engineering, refrigeration and radio business of the British Thomson-Houston Co., Ltd., has been taken over by the Edison Swan Electric Co., Ltd. All inquiries regarding B.T.H. church lighting equipment, and applications for advice or assistance in the planning of schemes, should be addressed to the Edison Swan Electric Co., Ltd., nearest branch office. In the booklet various systems of electric lighting are described, and photographs are reproduced of a number of the many churches electrically lighted by B.T.H. equipment. For the purpose of comparison other photographs are reproduced, showing some of the same churches lighted by means of their original installations, or by daylight. The adaptability of the firm's system of lighting to interiors of any style or period is indicated by these many photographs, especially those of Peterborough, Durham and Liverpool Cathedrals, and the Greek Cathedral of St. Sophia, London. Peterborough and Durham Cathedrals are several hundred years old; both are of Norman architecture. Liverpool Cathedral is modern, and the Cathedral of St. Sophia is in the Byzantine style. All are lighted by the firm's system of lighting, using B.T.H. equipment.

The accompanying illustration shows the new gasholder at Southall from a novel point of view, looking up the interior collapsible staircases. It is reproduced from an illustrated record of progress published by the Gas Light and Coke Company, on the occasion of the absorption of the areas of the Grays and Tilbury Gas Company and the Pinner Gas Company, Ltd. The new gasholder at Southall, which is equipped with a lift to enable the maintenance men to inspect the plant under the roof, is more than 300 feet high, and holds eight million cubic feet of gas—almost enough to fill both the R.101 and R.100.

The British Insulated Cables, Ltd., have secured the contract for erecting an overhead power line from Stourport to Banbury, to the order of the Shropshire, Worcestershire and Staffordshire Electric Power Co. This overhead line will, it is claimed, be fifty miles in length, and is to consist of

steel-cored aluminium conductors supported on steel lattice towers. The voltage is 66,000, and the approximate cost of the work £110,000. The steel-cored aluminium conductors will be manufactured at the Prescot works of the company.

Shop-window lighting is the subject of a useful manual compiled for all interested in modern shop-window illumination by Messrs. Philips Lamps, Ltd., with the object of placing the contractor in a position to offer the shop-keeper advice on how to produce the best possible effect by means of lighting. A wide variety of examples have been dealt with and also the method of installation of fittings, concealment of reflectors by pelmets and cornices, planning of mains installations, and methods of arriving at the correct wattage. Particulars of the various effects to be obtained by the use of different lamps and coloured light are given, whilst, finally, the peculiar requirements of different types of shops are dealt with.

The data, of which an example is given below, are the result of experience gained in actual practice.

DRAPERS.—Materials can be divided into two classes, each of which requires a different application of light. First, there are the shining materials such as brocade, silk, satin, taffeta, chiffon-velvet, shantung and the artificial silks, Tricoline and shining zephyr. In order to retain this shining effect they should be illuminated by clear lamps. Secondly, if a display is arranged consisting of woollen materials, or materials such as muslin, plush or velour velvet, woollen tricots, charmelaine, flannel, Viyella, Kasha, cheviot, worsted and poplin, soft light must be used, giving a warm effect and casting little shadow. Argenta lamps are recommended for this purpose. Materials in which yellow is the dominating colour, from light beige to reddish brown, are best illuminated with clear gas-filled lamps. In the case of various materials of different colours, clear lamps should predominate, with a few daylight blue lamps in between. Very bright colours, such as blue, green and purple, must be illuminated exclusively with daylight blue lamps.

From the above it will be seen that the shopkeeper should keep a certain number of lamps in stock, so that he can in every case give his display the correct illumination. The cross position of the lamps is of great importance in connection with the draping of the materials. If, for instance, the window-dresser wishes vertical folds to show up, he must not use upper lights, but side-lights, and if he wishes to soften the shadows thrown by the folds, it is necessary to make use solely of the upper light or foot-light.

The manual is pocket size and is profusely illustrated.

Messrs. Philips Lamps, Limited, of 145 Charing Cross Road, London, W.C.2, will send a copy free of charge to any readers making application on their business notepaper, whilst the limited supply of the first edition lasts.

THE ARCHITECTS' DIARY

WEDNESDAY, APRIL 30

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Architects' Drawings of 1800–1850. 10 a.m. till 8 p.m. Saturdays 10 a.m. till 5 p.m. Exhibition closes on May 24. **10 a.m.**

LIVERPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, School Lane, Liverpool. Annual General Meeting. **8 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

THURSDAY, MAY 1

WEST YORKSHIRE SOCIETY OF ARCHITECTS, 62 Woodhouse Lane, Leeds. Annual General Meeting. **7 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Ordinary Meeting. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S. **6 p.m.**

FRIDAY, MAY 2

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Exhibition of Wall Papers. 10 a.m. till 10 p.m. **10 a.m.**

NATIONAL SMOKE ABATEMENT SOCIETY, 71 Eccleston Square, Westminster, S.W.1. "By-laws under section 5 of the Public Health (Smoke Abatement) Act, 1926." By C. J. Allpass, L.C.C. To be followed by a discussion. **3.30 p.m.**

ROYAL SANITARY INSTITUTE. At the Town Hall, Tunbridge Wells. Tea, 5 p.m. Discussion on: "Can the Slum be Abolished?" to be opened by H. T. Taylor, M.S.I.A. 5.30 p.m. Edward Willis, M.INST.C.E., F.S.I., M.INST.T., will preside. **5 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Meter and Instrument Section. "The Metering Arrangements for the 'Grid' Transmission System in Great Britain." By C. W. Marshall, B.Sc. **7 p.m.**

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. Meeting of the West Midland District at the Town Hall, Kidderminster. "Ten Years' Municipal Progress in Kidderminster." By J. Hawcroft, O.B.E. To be followed by a discussion. Also, various visits of inspection. **2.30 p.m.**

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "History of Ancient Sculpture." By Professor Bernard Ashmole. (Lantern Illustrations.) **5 p.m.**

SATURDAY, MAY 3

Sunrise, 5.30 a.m. Sunset, 8.24 p.m.

ROYAL SANITARY INSTITUTE. At Tunbridge Wells. Meet at Town Hall for visit to the premises of the New Maternity Home, 10–12 Calverley Park Gardens, where the architect, A. S. Killby, F.R.I.B.A., will give a brief address. 9.45 a.m. Visit to the Isolation Hospital. 10.45 a.m. Light refreshments will be provided. **9.45 a.m.**

MONDAY, MAY 5

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition opens to the public. **10 a.m.**

TUESDAY, MAY 6

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. "Luminous Traffic Signals." By T. Austin. (Light refreshments at 6.30 p.m.) **7 p.m.**

WEDNESDAY, MAY 7

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "National Parks." By S. K. Ratcliffe. Sir Fabian Ware, K.C.V.O., K.B.E., will preside. **8 p.m.**

THURSDAY, MAY 8

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "Dante and Italian Art." By Professor Edmund G. Gardner, F.B.A. (Lantern Illustrations.) **5.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. Ordinary and Annual General Meetings. **6.30 p.m.**

FRIDAY, MAY 9

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual General Meeting. "The Rotary Automatic Telephone System." By J. W. Moffatt and J. C. Emerson. **6.15 p.m.**

SATURDAY, MAY 10

Sunrise, 5.18 a.m. Sunset, 8.36 p.m.

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Annual General Meeting. Address by G. C. Laurence, F.R.I.B.A., R.W.A., Chairman of Allied Societies Conference. **6.15 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 12

R.I.B.A., 9 Conduit Street, W.1. Ninety-sixth Annual General Meeting. **8 p.m.**

WEDNESDAY, MAY 14

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Annual Dinner at the Hotel Victoria, Northumberland Avenue, W.C.2. The Earl of Crawford and Balcarres will preside. 7.30 for 7.45 p.m. (Tickets 12s. 6d. each.) **7.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art to be opened by the Archbishop of Canterbury.

LONDON UNIVERSITY Presentation Day. Albert Hall. **2.30 p.m.**

THURSDAY, MAY 15

R.I.B.A., 9 Conduit Street, W.1. Annual Dinner to be held at the Guildhall, E.C.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual General Meeting, 6 p.m. Irish Centre (Dublin). At the Physical Laboratory, Trinity College, Dublin. Annual General Meeting, 7.45 p.m. Hampshire Sub-Centre. At Southampton, Summer Meeting. **6 p.m.**

FRIDAY, MAY 16

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Technical College, Dundee. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S. **7.30 p.m.**

SATURDAY, MAY 17

Sunrise, 5.6 a.m. Sunset, 8,47 p.m.

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Second visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 19

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. General Meeting. "The Architectural Association, 1847–1930." By F. R. Yerbury. (Lantern Illustrations.) Exhibition of Architecture of Bloomsbury; also work of Eric Mendelsohn. Until June 14.

WEDNESDAY, MAY 21

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

THURSDAY, MAY 22

ARCHITECTURE CLUB. Dinner to Eric Mendelsohn. Particulars will be announced at a later date.

SATURDAY, MAY 24

Sunrise, 4.57 a.m. Sunset, 8.57 p.m.

MONDAY, MAY 26

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Recent Excavations at Ur." By C. Leonard Woolley, M.A., HON.A.R.I.B.A. **8 p.m.**

WEDNESDAY, MAY 28

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Father of English Pottery—Josiah Wedgwood, F.R.S., Potter, Inventor and Man of Science." By Harry Barnard. Frank H. Wedgwood will preside. **8 p.m.**

SATURDAY, MAY 31

Sunrise, 4.50 a.m. Sunset 9.5 p.m.

MONDAY. JUNE 2

INSTITUTION OF ELECTRICAL ENGINEERS. Summer Meeting at the Irish Centre. June 2–6, inclusive. Assemble in the evening at the Gresham Hotel, Dublin.

TUESDAY, JUNE 3

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Motor trip in Co. Wicklow, including inspection of overhead transmission lines. Lunch and tea at Glendalough.

WEDNESDAY, JUNE 4

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Proceed by special train to Limerick for visit to the Shannon Scheme.

THURSDAY, JUNE 5

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Visit the brewery of Messrs. A. Guinness, Sons & Co. Lunch by invitation of the Company. Afternoon: Leave Dublin by special train for Belfast. Evening: Reception by the Lord Mayor of Belfast, Rt. Hon. Sir William Coates, at the City Hall.

SATURDAY, JUNE 7

Sunrise, 4.45 a.m. Sunset, 9.12 p.m.

THURSDAY, JUNE 12

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual Conversazione, to be held at the Natural History Museum, South Kensington, S.W.

SATURDAY, JUNE 14

Sunrise, 4.43 a.m. Sunset, 9.18 p.m.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Annual General Meeting and Annual Dinner. Particulars will be announced later.

MONDAY, JUNE 16

R.I.B.A., 9 Conduit Street, W.1. Election of Council and Standing Committees: Election of Members. **8 p.m.**

WEDNESDAY, JUNE 18

R.I.B.A., 9 Conduit Street, W.1. British Architects' Conference, to be held at Norwich. Until June 21 inclusive.

FRIDAY, JUNE 27

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL SOCIETY, The Castle, Winchester. Excursion to the Joinery Works of Messrs. W. E. Chivers and Sons, Ltd., Devizes, and buildings of architectural interest in the neighbourhood. A General Meeting will be held after lunch.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BARNES U.D.C. is to erect slipper baths and sixteen houses on a site in High Street.

The BATTERSEA B.C. is seeking sanction to borrow £4,330 for extensions at the maternity home at Bolingbroke Grove.

The BERMONDSEY B.C. proposes proceeding with a scheme for dealing with an unhealthy area in the vicinity of Rotherhithe Street, under the new Government slum clearance scheme.

The BERMONDSEY B.C. is to convert a large building at Grange Road into eight flats, and erect six flats and two cottages on an adjoining site.

The CATERHAM U.D.C. is to erect a further thirty-six houses on the Stafford Road site.

The COULSDON U.D.C. has appointed a sub-committee to confer with the surveyor upon the selection of suitable sites for the erection of further houses and the suggested layout.

Mr. H. Edmund Matthews has prepared plans for extensions at St. Peter's Hospital, Henrietta Street, COVENT GARDEN, the cost being estimated at £25,000.

Plans passed by the CROYDON Corporation: Alterations and additions, Purley Congregational Church, Brighton Road, for Mr. T. A. Lewis; two houses, Devonshire Way, for Messrs. Burcote, Ltd.; eleven garages, St. Oswald's Road, for Mr. F. W. Milton; additions to joinery works, 79 High Street, Thornton Heath, for Messrs. Truett and Steel, Ltd.; two houses, Croham Valley Road, for Mr. G. W. Peachey; alterations and additions, "The Wheatsheaf" public-house, London Road, for Mr. G. G. Stanham; four houses, Ballards Way, for Messrs. Taylor Bros.; five houses, Addiscombe Road, for Messrs. J. B. and W. B. Hemmings; twenty-eight houses, West Way, for Messrs. M. Brown and Sons, Ltd.; alterations and additions, 212 Lower Addiscombe Road, for Lloyds Bank, Ltd.; thirty-five houses, Covington Gardens and Covington Way, for Messrs. Thomas and Son; three shops, Bishops Park Road, for Mr. H. Macintosh; two houses, Grange Hill, for Mr. H. Beckett.

The Essex Education Committee has purchased sites in Rectory Road and in Eastbrook Road, DAGENHAM, for the erection of two elementary schools.

The EAST HAM Corporation is seeking sanction to borrow £133,000, for the construction of roads and the erection of houses on land at Charlmont Road.

Plans passed by FULHAM B.C.: Buildings, Parsons Green Lane, for Mr. A. Hulbert (London Co-operative Society); buildings, Fulham Pottery site, New Kings Road, for Mr. F. C. Wylde; buildings, Peterborough Mews, for Mr. G. Roberts.

The Deacons of the Highbury Church, ISLINGTON, are to reconstruct the building, in accordance with plans prepared by Messrs. Hobden and Porri, architects.

The ISLINGTON B.C. has obtained a site in Wharfedale Road, for the erection of an electricity sub-station.

Plans passed by the KENSINGTON B.C.: Building, near Colville Square Mews; building, site of 42–45 St. Mary Abbot's Terrace; one-story addition, front of 159 Holland Park.

The POPLAR B.C. has obtained sanction from the Ministry of Health for the use of a site in Sophia Road, for the erection of washhouses.

Plans passed by the POPLAR B.C.: Extensions, Messrs. Allen-Liversidge, Ltd.; works, Dewberry Street, for Mr. E. L. Mason; building, "Grundy Arms" public-house, 83 Grundy Street, for Mr. A. E. Sewell; building, 178 Bow Road, for Mr. W. Patten; additions, open-air swimming bath, recreation ground, East Ferry Road, for Messrs. H. Somerford and Son, Ltd.

The POPLAR B.C. reports that negotiations are proceeding for the acquisition of further housing sites.

The POPLAR B.C. has asked the borough engineer to prepare plans for the reconstruction of Leonards bridge over Limehouse Cut.

EASTERN COUNTIES

The Essex C.C. has passed plans for the erection of a combined treatment and instruction centre at BRIGHTLINGSEA, at a cost of £3,250.

The Essex Education Committee has purchased a site on CANVEY ISLAND, for the erection of an elementary school.

The COLCHESTER Corporation has obtained a grant for the reconstruction of the railway bridge in Ipswich Road, at a cost of £15,000.

The ESSEX C.C. and the L.M.S. are to widen the railway bridges at Rainham Road and Hornchurch Road, at a cost of £23,600.

Messrs. Frank Matcham & Co. are to erect a cinema at GRAYS, Essex.

The Essex Education Committee has decided to erect a central school at HEYBRIDGE.

The Essex Education Committee has approved sketch plans for extensions at the village school, HORNCHURCH, at an estimated cost of £21,000.

The Essex Education Committee has purchased a site in Station Road, PITSEA, for the erection of a junior school.

The Essex Education Committee has purchased a site on the Upminster estate, RAINHAM, for the erection of a central school.

The Essex Education Committee has passed plans for the erection of an infants' school and instruction centre at Hanering Road, ROMFORD, at a cost of £16,000.

The Essex C.C. is acquiring a site of 150 acres of land at THREMHALL, for the provision of a new poor law institution for the Saffron Walden district.

The Essex Education Committee is to extend the elementary school at UPMINSTER, at a cost of £15,000.

SOUTHERN COUNTIES

Mr. G. T. Gardner, on behalf of Messrs. Morrells, trustees, is to rebuild the "Fox" public-house at BARTON, near Oxford.

The BEXHILL Corporation has empowered the town clerk to negotiate for additional housing sites.

Plans passed by the BEXHILL Corporation: Two houses, Cooden Drive, for Messrs. Skinner Brothers; house, Plemont Gardens, for Mr. E. H. Gandy; house, Cooden Drive, for Messrs. Tubbs and Messer; two houses, Cooden Drive, for Mr. R. A. Larkin; six houses, Mayo Lane, for Mr. C. Purser; cottage, Haddocks Hill, for Mr. E. Bunce; four houses, St. James's Avenue, for Messrs. Radcliffe and Bishop; two houses, Southlands Road, for Mr. E. Bunce; house, Clavering Walk, for Mr. A. E. Swaffer; three cottages, Church Hill, Little Common, for Mr. J. E. Maynard; service station, Station Road, for Mr. J. H. Lye; swimming bath, "Falconbury," Collington Lane, for Messrs. Stonham.

The foundation of the new private block and the enlarged out-patient department of the Royal Victoria and West Hants Hospital, BOURNEMOUTH, will be laid next month.

Plans passed by the BOURNEMOUTH Corporation: Extensions, Tower of Boscombe Congregational Church, Christchurch Road, for the trustees; schoolroom, Baptist Church, Palmerston Road, for the deacons; additions, Gervis Place, for Messrs. Plummers, Ltd.; alterations and additions, Deveron Lodge, Christchurch Road, for Dr. A. R. N. MacGillycuddy; workshop, Oxford Road, for Messrs. H. J. Dyer and Sons; garage and stores, Bournemouth Steam Laundry, Littledown Road, for the Steam Laundry Co.; additions, Old Water Works, Iford Lane, for Mr. H. W. Kiddle; alterations, Durley Hall, Chine Road, for Mr. A. E. Burr; additions, The Square, for Messrs. Richmond Chambers, Ltd.; alterations, 547 Christchurch Road, Boscombe, for the Domestic Repair Co., Ltd.; seven houses, Boscombe Road and Michelgrove Road, for Mr. C. V. Miller; house, Barrie Road, for Mr. F. Moorman; house, Southwood Avenue, for Mr. E. W. Pedrick; house, Thistlebarrow Road, for Mrs. M. Luval; house, Michelgrove Road, for Mr. Miller; shop, Commercial Road, for Messrs. Montague Burton, Ltd.; house, Little Forest Road, for Mr. F. G. Barnes; shops and flats, Bourne Avenue, for Messrs. Richmond Chambers, Ltd.; shop, Westover Road, for Mr. S. B. Parsons; house, Fernside Road, for Mr. A. E. Bolton; two houses, Latimer Road, for Mr. H. Osmond; house, Firs Glen Road, for Mr. B. J. Watts; house and shop, Wimborne Road, for Mr. E. C. Tonge; two houses, Strouden Avenue, for Mr. A. Cook; house, Southlands Avenue, for Mr. J. Bayliss; workshop, Ashley Road, for Mr. H. Lazenby; house, Ashling Crescent, for Mr. T. R. Marshall; house, Charminster Avenue, for Mr. A. Weigh; hall, Charminster Road, for Dr. Moody; shops, Christchurch Road, for Southern Railway Co.; eight houses, Newcombe Road, Southbourne, for Mr. S. Kermode; five houses, Claremont Road, for Mr. S. G. Ward.

The Oxford Corporation has passed plans, submitted by Mr. J. R. Wilkins on behalf of Messrs. F. and R. Lewis, of the layout of a building estate on the Garsington Road, COWLEY.

The DARTFORD U.D.C. has passed plans, submitted on behalf of Viscount Tredegar, for new roads off Knowle Street and Chastilion Road.

Plans passed by DARTFORD U.D.C.: Six houses, Cranford Road, for Mr. G. W. Chancellor; two houses, Carrington Road, for Mr. H. Roberts; alterations and additions, "Woodman" public-house, East Hill, for Dartford Brewery Co., Ltd.; two houses, Kiln Lane, for Mr. T. J. Kerslake; bungalow, Kiln Lane, for Mr. D. H. Newsome; four houses, Havelock Road, for Mr. G. H. Giles; house, Brent Lane, for Mr. R. F. Turvill; house, Wayville East, for Mr. T. Whybrow; alterations, 17 High Street, for Messrs. George Mence Smith, Ltd.; new premises, Dartford Road, for Dartford Co-operative Society, Ltd.; sixteen houses, Shepherds Lane, for New Ideal Homesteads, Ltd.

The FAVERSHAM Corporation has decided to erect another sixty-six houses on the Council estate.

The Manor Estate Co. is to construct roads on its estate at HEADINGTON, near Oxford.

The HERNE BAY U.D.C. has asked the surveyor to report as to the possibility of erecting a public hall adjacent to Richmond Avenue.

The Kent Education Committee is to erect an elementary school for 600 children at HERNE BAY.

Plans passed by the HERNE BAY U.D.C.: Bungalow, Mickleburgh Hill, for Mr. G. R. Brown; house, Queensbridge Drive, for Mr. E. J. Line; six houses, Mickleburgh Hill, for Mr. C. H. H. Kenworthy; store, The Broadway, for Mr. W. Hancock; house, Grand Drive, for Mr. Clarkson.



Bungalow at Sandon. Designed by Kenneth M. B. Cross. The main walls are constructed in 9-in. brickwork, plastered on the inside and cement-rendered outside. The roof is covered with hand-made sand-faced tiles; and wood casements have been fitted. The ground-floor plan is reproduced on page 699.

The NEWBURY Corporation has approved plans for the erection of a cinema in Bartholomew Street.

Plans passed by the NEWBURY Corporation: House, Oxford Road, for Mr. R. S. Knill; alterations and additions, 18 Buckingham Road, for Mr. E. Gunter; alterations and additions, 22 Bartholomew Street, for Mr. G. E. Whitehorn; alterations and additions, 32 and 34 Market Place, for Mr. R. Beyon; two houses, Kingsbridge Road, for Mr. W. Samuels; alterations and additions, 38 Salcombe Road, for Mr. C. Wright; Gospel Mission hall and shop, Kennet Road, for Mr. A. E. Churches.

The OXFORD Corporation has sold land at Iffley Road to Mr. George Simmonds, for the erection of twenty-four houses.

The OXFORD Corporation has passed plans, prepared by the city estates surveyor, for the improvement of the south-east corner of Carfax and the extension of the municipal buildings, at an estimated cost of £18,000.

Plans passed by the OXFORD Corporation: Two houses, Ramsey Road, Headington, for Mr. G. Coppock; two houses, Ferry Road, New Marston, for Mr. F. Weller; house, Old Road, Headington, for Mr. A. G. Morse; three houses, New Road, Headington, for Mr. F. Watts; rebuilding stores, Trill Mill, for Messrs. T. Warburton and Sons; house, Hamilton Road, for Miss G. V. Chandler; students' residential quarter, adjoining church, Iffley Road, for the Rev. Father Cuthbert; house, Old Road, Headington, for Mr. R. Jordan; extensions, Garsington Road, for Morris Motors, Ltd.; extensions to cabinet-making works, Cowley Road, for Messrs. Greenings, Ltd.; house, Sandfield Road, Headington, for Mr. D. H. Carstairs; five houses, Glanville Road, for Mr. F. Organ; extensions, Garsington Road, for the British Paint and Lacquer Co.; bungalow, York Avenue, Headington, for Mr. H. W. Smith; house, Sandfield Road, Headington, for Mr. L. G. Laithwaite; two houses, Pullen's Road, Headington, for Messrs. F. and R. Lewis; additions to girls' school, London Road, for the managers.

The TONBRIDGE U.D.C. is to erect twenty-four houses in Baltic Road.

The WOODSTOCK (OXON) R.D.C. reports that the Gosford Hill estate is to be developed for building purposes.

SOUTH-WESTERN COUNTIES

The PAIGNTON U.D.C. has deferred consideration of the sketch plan, submitted by the surveyor, of a proposed concert pavilion with seating accommodation for 2,000 on a site near the Eastern Esplanade.

Mr. Morgan Rigg, architect, is to convert farm buildings at Folly Road, PENRHYN, into dwellings.

A cinema to seat 3,000 people is to be built at Frankfort Street, PLYMOUTH. Provision will be made for a café, a stage and a motor park.

The WEYMOUTH Corporation is to erect an electricity sub-station in the Preston district.

The WEYMOUTH Corporation has arranged for Mr. White, of Messrs. Milner, Son and White, landscape architects, to prepare a scheme for the layout and development of the Radipole Lake area.

Plans passed by the WEYMOUTH Corporation: Extensions, Dorothy Restaurant, for Messrs. Andrews and Andrews; alterations to premises, St. Thomas Street, for Messrs. J. A. Parsons and Sons; two houses, Southlands Road, for Messrs. S. Jackson and Sons; house, Dorchester Road, for Mr. F. Greenaway; additions to ice cream factory, Great George Street, for Messrs. S. Jackson and Sons; two houses, Southlands Road, for Mr. K. Openshaw; three houses, Wardcliffe Road, for Mr. D. S. Tarving; two houses, Monmouth Road, for Mr. G. R. Taylor; bungalow, St. George's Avenue, for Mr. G. Rogers.

MIDLAND COUNTIES

The BEDFORD Corporation has obtained sanction for a loan of £51,000, for the London Road housing scheme.

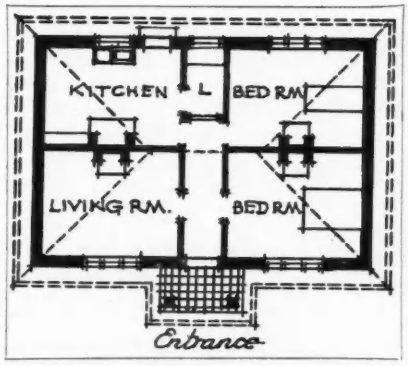
Plans passed by BEDFORD Corporation: Alterations and additions, "Three Cups" public-house, Newnham Street, for Messrs. Wells and Winch, Ltd.; six houses, Elstow Road, for Mr. G. P. Allen; alterations, premises of M.C.C. Co., Ltd., 71 Tavistock Street, for Mr. E. H. C. Inskip; seven garages and workshop for Windward Motor Co., Lurke Street, for Mr. E. H. C. Inskip.

The Chatterley-Whitfield Collieries, Ltd., are to erect 170 houses on a site at CHELL, Staffs.

Plans passed by the GLOSSOP Corporation: House, Newshaw Lane, Hadfield, for Mr. Joseph Wood; alterations, 68 High Street West, for Mr. W. Torkington; conversion of Simmondley House into two cottages, for Mr. S. G. Smith.

Messrs. W. Campbell and Sons, architects, are to develop the Caledonia estate at SHELTON, Staffs.

The SMETHWICK Watch Committee has passed plans of proposed alterations to the Princes Hall cinema, for Mr. E. Hewitson.



Bungalow at Sandon. Designed by Kenneth M. B. Cross. In addition to the accommodation shown on the ground floor, storage space is provided in the roof.

The STOKE-ON-TRENT Watch Committee has approved plans for alterations at the following premises: The Picture Palace, Market Street, Fenton; Alhambra Picture Theatre, Longton; Empire Theatre, Hanley.

The STOKE-ON-TRENT Corporation has decided to erect twenty-four houses on the High Street estate, Pittshill, at a cost of £8,624.

The STOKE-ON-TRENT Corporation is to erect an electricity station in Barlaston Old Road, Trentham.

Mr. H. Beckett is to erect fifty houses on the Moreton estate, WOLSTANTON, Staffs.

NORTHERN COUNTIES

The BOLTON Education Committee is to enlarge the Tonge Fold infants' school.

The BOLTON Education Committee is preparing plans for the proposed new technical college.

Mr. A. E. Shennan, architect, of North John Street, Liverpool, has prepared plans for a new cinema to accommodate 800 people, to be erected in Allport Lane. BROMBOROUGH.

The CHESHIRE Education Committee has obtained sanction for a loan of £8,700, for extensions at Sale High School for Girls.

The CHESHIRE C.C. has asked the Medical Officer to prepare a scheme for the provision of isolation hospital accommodation for the Bucklow district.

The CHESHIRE C.C. is in negotiation with the Weaver Navigation Trust regarding a proposal for the reconstruction of the bridge over the Weaver at Acton Bridge.

The CHESTER Corporation is to reconstruct the electricity showrooms in Northgate Street, in accordance with plans prepared by Mr. F. C. Saxon, F.R.I.B.A.

Plans passed by the CHORLEY Corporation: Offices, Quarry Road, for Messrs. J. W. Lee, Ltd.; manse, Millfield Road, for the Wesleyan Circuit; two houses, Millfield Road, for Messrs. J. Fairclough; house, Millfield Road, for Mr. Lewis Wilson; house, Millfield Road, for Misses Leach; extensions, 27 and 29 Chapel Street, for Messrs. Stopforth and Lloyd.

The CHORLEY Education Committee has decided to provide three new public elementary schools on sites within the borough.

The CHORLEY Corporation is to erect ninety houses on the Beaconsfield estate.

The Lancashire Education Committee has passed a revised estimate of £21,500 for the erection or an elementary school at CULCHETH NEWCHURCH.

The Lancashire Education Committee has purchased premises in Crow Road, EARLESTON, for conversion into a school clinic.

The Lancashire Education Committee is to erect a senior school for the FLIXTON and URMSTON district, at a cost of £48,500.

The GRIMSBY Education Committee has decided upon the erection of a secondary school for 1,000 pupils at Highfield.

The GRIMSBY Corporation Markets Committee is to construct the first part of the new cattle market, at a cost of £12,000.

The Lancashire C.C. has purchased a site in Hind Street, HEYWOOD, for the erection of a court room and police station.

The Preston Corporation is to erect an electricity sub-station in Cockerton Lane, HUTTON.

The Lancashire Education Committee has voted a revised estimate of £32,000 for extensions at the HUTTON Grammar School.

The Lancashire Education Committee is to erect a senior school at Cadishead Road, IRLAM, at a cost of £28,000.

The Lancashire C.C. has acquired land for the widening of the LOLLIES canal bridge.

The L.M.S. Railway Co. is to erect a new hotel at MORECAMBE.

The MORECAMBE Corporation is to erect an electricity sub-station at Broadway.

The MORECAMBE Corporation proposes to undertake the first part of the Old Harbour improvement scheme, including the construction of a bathing pool, at a cost of £30,000.

The MORECAMBE Corporation has asked the Sea Defence Committee to report on the proposal to extend the promenade widening along the frontage of the Calton estate.

Plans passed by the MORECAMBE Corporation: Store, Longlands Crescent, for Mr. H. Beasley; houses, Devonshire Grove, for Messrs. Naylor and Robinson; two bungalows, Lancaster Road, for Mr. F. Hodgson; two houses, Morecambe and Lancaster New Road, for Mr. A. Hargreaves; shop, Devonshire Road, for Mr. F. N. Moore.

The Lancashire Education Committee is to erect a senior school at Paddock Street, OSWALDTWISTLE, at a cost of £28,000.

The Lancashire Education Committee has obtained land for extensions at the Church and OSWALDTWISTLE technical school.

The PAIGNTON U.D.C. is seeking sanction to borrow £6,770 required for the purchase of land on the Collate estate, for the erection of further houses.

The PAIGNTON U.D.C. surveyor has prepared plans for the layout of the Goodrington South Sands; also the erection of conveniences and huts.

The Paignton Electric Light and Power Co., Ltd., is to erect a sub-station in Butland Avenue, Preston, PAIGNTON.

Plans passed by the PAIGNTON U.D.C.: Eight houses, Winsur Avenue, for the Gower Construction Co., Ltd.; house, Marldon Road, for Mr. A. Allen; store, Totnes Road, Tweenways, for Mr. J. Littleton; house, Dartmouth Road, for Mr. B. F. Webber; two bungalows, Longstone Lane, for Mr. A. Cole; house, Langdon Road, for Mrs. Lang; shop and flat, Torquay Road, for Messrs. Diggins Bros.; two houses, Totnes Road, Tweenways, for Messrs. Knapman Bros.; four houses, Maidenway Road, for Mr. L. Veal; fourteen houses, Coombe Street, for Messrs. Peeke Bros.; four houses, Hilton Drive, for Mr. H. Proctor; two houses, Longstone Lane, for Mr. A. Cole.

The Penrith Co-operative Society is to erect ten houses, in Norfolk Street, PENRITH, from the designs of Mr. Knewstubb.

Plans passed by the PENRITH U.D.C.: Eighteen houses, Fell Road, for Mr. J. Kitchen; workshop and garage, Queen Street, for Mr. J. S. Bakewell; bakery, Princes Street, for Mr. J. B. Irving.

The Lancashire Education Committee is seeking sanction for a loan of £22,000 for the erection of a senior school at POULTON-LE-FYLDE.

The Lancashire Education Committee is to erect a junior and infants' school at Thorndyke Road, PRESTWICH, at a cost of £14,000.

The Lancashire Education Committee is seeking sanction to borrow £17,500 for the erection of a junior school and an infants' school at Sedgley Road, PRESTWICH.

The Lancashire Education Committee is to erect a senior school at THORNTON CLEVELEY, at an estimated cost of £35,000.

Messrs. Nixon and Beckett are to build fifty houses on an estate off King William Street, TUNSTALL.

The Lancashire Education Committee is seeking sanction to borrow £45,000 for the erection of the proposed senior school at Walkden Street, WORSLEY.

SCOTLAND

The GLASGOW Education Committee is to erect an elementary school at Liberton Street, North Carntyne.

The GLASGOW Education Committee is to erect an elementary school on the Campbell Street housing estate.

The GLASGOW Corporation Housing Committee is considering a layout plan, prepared by the housing department, showing a proposal to build 210 three-story tenement houses on the High Craghall housing estate.

The GLASGOW Corporation has passed amended plans for the reconstruction of the Waterloo Street premises of the electricity department.

The GLASGOW Corporation is to erect electricity sub-stations at Barloch Street, Possilpark, and Calder Street, Coplawhill.

The GLASGOW Corporation has asked the Master of Works to prepare a scheme for the improvement of the area from Stockwell Street to Jamaica Street southwards to the River Clyde.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Bursledon ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour ;* NAVVY, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

	£	s.	d.
Portland cement, per ton	2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day :

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. . . . £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. . . . 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
If left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . 0 2 10
PUDDLING, per yd. cube . . . 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 1 17 6
DO. 6-2-1, per yd. cube . . . 1 12 6
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 14 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube . . . 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* BRICKLAYER, 1s. 8½d. *per hour ;* PLUMBER, 1s. 8½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Stoneware pipes, tested quality, 4 in., per ft.	0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0

Portland cement and sand, see "Excavator" above.

Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3
Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
London stocks, per M.	24	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M	5	10	0
Seconds, less, per M.	1	0	0

Cement and sand, see "Excavator" above.

	£	s.	d.
Lime, grey stone, per ton	22	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
Surfaced with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour ;* DO. *fixer,* 1s. 9½d. *per hour ;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
Portland Stone :			
Whitbed, per ft. cube	0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6

Cement and sand, see "Excavator," etc., above.

HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour ;* TILER, 1s. 8½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200 :

	£	s.	d.
Portmadoc Ladies	14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2

Cement and sand, see "Excavator," etc., above.

Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal :

	£	s.	d.
Ladies, per square	4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0
Green randoms	6	7 0
Grey-green do.	5	9 0
Green peggies, 12 in. to 8 in. long	4	13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour ;* JOINER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*

	£	s.	d.
Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds) :			
7 × 3, per std.	22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER : *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic :			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work :			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS :			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY :			
Fixing only (including providing screws) :			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour ;* MATE, *do.* 1*s.* 3½*d. per hour ;* ERECTOR, 1*s.* 8½*d. per hour ;* FITTER, 1*s.* 8½*d. per hour ;* LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel :			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour ;* MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc. :			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only :			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour ;* LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass : 4ths in crates :			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour ;* LABOURER, 1*s.* 3½*d. per hour ;* FRENCH POLISHER, 1*s.* 8½*d. per hour* PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£2	19	9
Linseed oil, raw, per gall.	0	4	9
DO., *boiled, per gall.*	0	5	0
Turpentine, per gall.	0	4	0
Patent driers, per cwt.	1	10	0
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	1	19	0
Double size, per firkin	0	3	3
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	6
Varnish, copal, per gall. and up	0	15	0
DO., *flat, per gall.*	0	15	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	-
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, ⅛ in., grey flat per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain " diamond " per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	1/10 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	11	9½	10 —
Figured Oak 1 side	5½	7	—	10	8	—	11½	—	—	1	8	— —
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1	0	— —
Oregon Pine	5	4	—	6½	5	—	8	—	—	—	—	— —



CONVENT CHAPEL
OF THE SISTERS OF BETHANY, BOURNEMOUTH.
By PROFESSOR W. G. NEWTON AND PARTNERS.

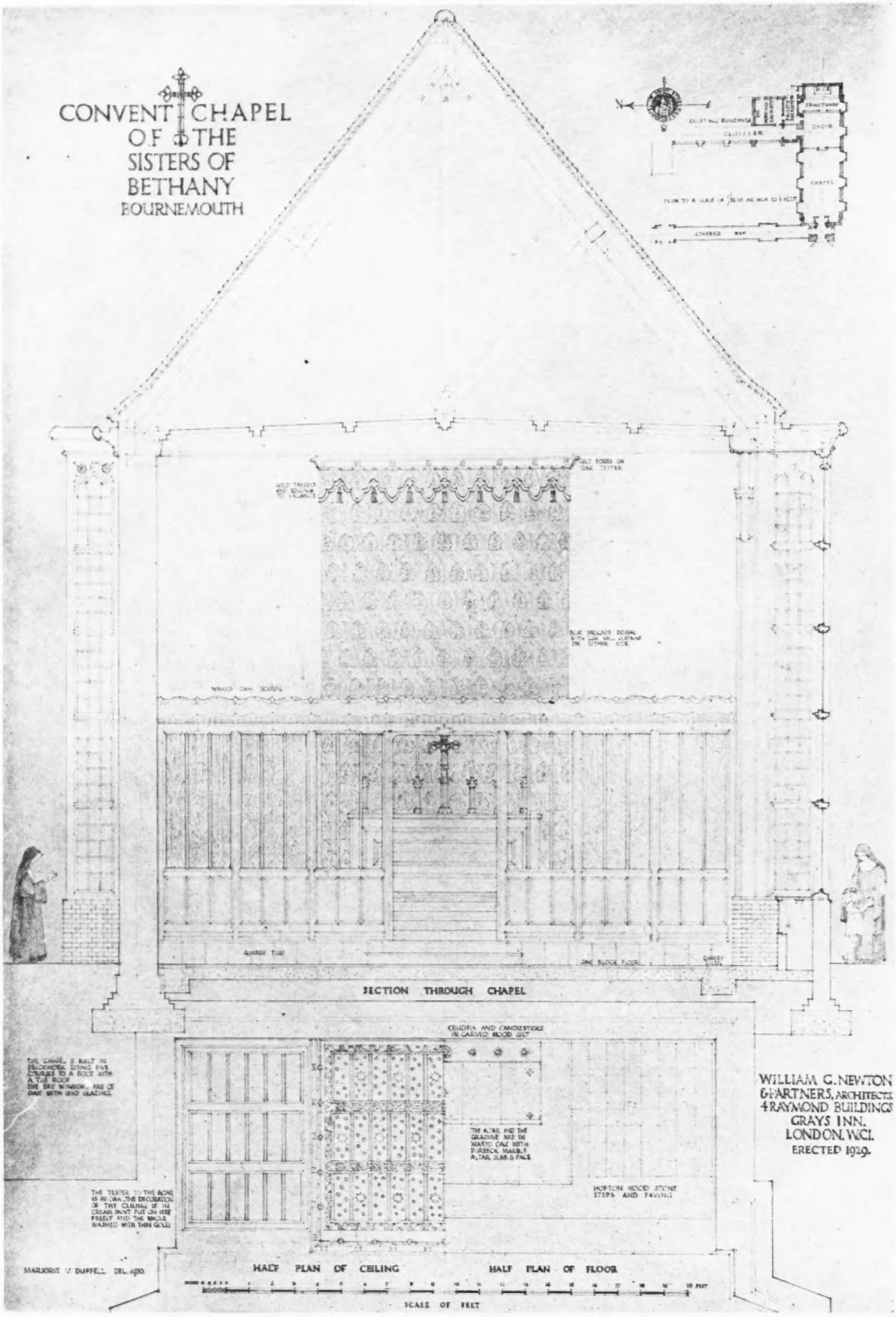
THIS chapel is an addition to a convent building, designed by Norman Shaw some fifty years ago. It is built in brick, having large oak bays with lead lights, and has a tile roof with an oak eaves cornice.

All the interior woodwork, including the beamed and canted ceiling, is in English oak, waxed and slightly polished, and the walls are warm cream coloured plaster : the floor of the chapel and the choir is of oak blocks with an edging and skirting of large quarry tiles. The floor of the sanctuary is of Hopton Wood stone, and the altar pace is of Purbeck marble.

The altar is oak, and has an oak tester with a moulded cornice having carved pateræ. The beams on the soffite of the tester are freely painted with patterns in cream paint and the whole washed lightly with gold. The valance to the tester, the dossal, and the side curtains are of Van de Weyden blue brocade, with gold tassels and border to the valance.

The altar candle-sticks are of wood gilt, and were made to the architect's design by Mr. Alan Durst, who designed and carved the figure on the cross.

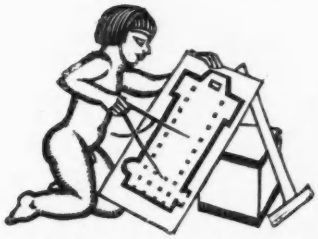
A detail drawing of the chapel, hung in this year's Royal Academy Exhibition, is reproduced on the following page.



For photograph see preceding page.]

[*Royal Academy Exhibition, No. 1324. Other R.A. drawings on pages 706 and 726-9.*

THE ARCHITECTS' JOURNAL



WEDNESDAY, MAY 7, 1930

FIVE GOOD MEN AND TRUE

The Ideal Jury of Assessors for the New R.I.B.A. Building

FOUR years hence the new home of the Royal Institute of British Architects at Portland Place will be completed and in occupation. The building will be plain for all to see, and not only to see but to judge. A heavy responsibility rests, therefore, upon those whose duty it is to formulate the conditions of the great competition which before the end of this year will be instituted in order to obtain designs for so important a building. As is well known, however, there are two sides to the competition—the choosing of the assessor or assessors who will be called upon to appraise the rival merits of the schemes submitted; and the choosing of the design.

The first and most urgent task, therefore, is to elect assessors who will have the confidence of the profession as a whole. This is easier said than done. For let us frankly face the difficulties which are here to be encountered. Architects cannot afford to conceal from themselves even the most unpleasant truths which relate to their present condition. Let the printed word express the thoughts which must come to us when we survey the true nature of the problem of appointing suitable assessors for this competition. The architectural profession, to an extent previously undreamt of in living memory, is torn with internal faction. The various sects which strive for supremacy entertain little respect for each other, so the possibility of any design for the new R.I.B.A. Building winning the approval of the profession as a whole is extremely remote.

It is bad enough when architects quarrel over questions of professional organization. In such political matters, however, we have a national tradition of good humour, and have learnt how to differ and yet live in peace. But in art this commendable degree of intellectual tolerance is very much harder to achieve, and we have evidence that in the wordy warfare which is now waged between the rival schools of architectural thought the exponents on either side are out to kill. There is today a virulence and, indeed, one might say, a lack of scruple which was quite foreign to the discussions in which architects used to indulge a generation ago, and it augurs ill for the success of any attempt at a compromise such as might be arrived at by a middle party in the profession. Yet it is upon the formation of such a middle party that our hopes of solving the problem of the new R.I.B.A. Building must principally depend.

If the problem is difficult and seems at first sight almost impossible of solution, it is all the more incumbent upon us to put our heads together and tackle it in earnest. Reason and discussion and the methods of question and answer, provided that they are conducted fairly and with a genuine desire to elicit the truth, cannot fail to throw light upon this subject.

Can we find assessors whose combined talents and proved integrity of mind will inspire the competitors with the confidence that the decision arrived at will represent the collective wisdom of the profession?

In order to ascertain whether this be possible, THE ARCHITECTS' JOURNAL is today issuing a questionnaire in which readers are invited to suggest the names of five members who are best qualified to serve as assessors. Each member of this jury should not only supplement the gifts of the others, but should himself represent an important and reputable school of architectural opinion. We have, of course, our own views about this matter, but for the present we intend to keep them to ourselves. What is more important at the moment is to ascertain whether there is in any degree at all a concensus of opinion with regard to it in the ranks of the profession as a whole.

We request our readers to ponder well the questions which we are addressing to them. We anticipate that their answers will contain a wealth of suggestion which will merit the respectful study of the Committee engaged upon the task of appointing the Jury of Assessors for the new R.I.B.A. Building.



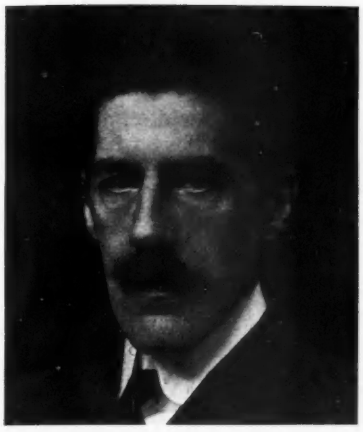
AN ESSEX YACHT CLUB:
BY JOSEPH EMBERTON

This perspective drawing, by W. Crabtree, shows the preliminary design for the proposed new premises for the Royal Corinthian Yacht Club, Burnham-on-Crouch, Essex.

On the ground floor the accommodation includes entrance hall, lounge bar, billiards room, mixed dining-room, and ladies' room; and on the first floor the men's dining-room and lounge, card-room, library, committee room and kitchen. Since the drawing was made it has been decided to add another floor, which will provide members' sleeping quarters and bathrooms.

The building is intended to be erected in reinforced concrete, and to occupy the site of the present club house. Large window areas are provided to give members the opportunity to enjoy, to the maximum extent, the magnificent views both up and down the river.

Royal Academy Exhibition No. 1302. Other R.A. drawings on pages 704 and 726-9.



NEWS & TOPICS

The Earl of Crawford and Balcarres, who in his Presidential address to the Council for the Preservation of Rural England, last week, said that the system of advisory panels was receiving the official support of the Ministry of Health.

Professor Patrick Abercrombie, who was last week elected the new President of the Liverpool Architectural Society, has held the Chair of Civic Design at Liverpool University since 1915, and has laid out eight new towns in Kent.



CHARING CROSS BRIDGE : LAMBETH'S SUGGESTION

LAMBETH Borough Council, who had not felt called upon during the course of the Parliamentary Committee's examination of the official Charing Cross Bridge scheme to offer suggestions, have now laid before the L.C.C. an alternative plan for dealing with the southern side of the river that goes far towards removing the objections raised to the official scheme. This plan is the result of collaboration between the borough engineer (Mr. Osmond Cattlin) and Mr. Thomas Adams and Mr. W. A. Davidge, both past presidents of the Town Planning Institute.

★

An essential feature of the scheme is that the Southern Railway station would be placed on the Waterloo Junction site, where it would occupy a position facing Waterloo Station itself, thus completing the semicircle of a D-shaped open space. Waterloo Road, without being buried under black tunnels, would be spanned by roadways connecting the two stations at high level, so that a complete circulation of taxi and motor traffic could be operated.

★

With the stations thus grouped together, the whole of the property lying between York Road and the river would be thrown open to the best form of development, and an embankment road of real usefulness would be not only possible, but, if the scheme were started upon, desirable and necessary.

★

The objections to this proposal are not by any means so evident as in the official scheme, while it definitely fulfils many of the requirements considered to be necessary by Sir Henry Cautley, the chairman of the Parliamentary Committee.

THE BURDEN OF DEATH DUTIES

The effects of death duties upon agriculture (and incidentally the countryside), discussed in a recent leading article of the JOURNAL, are given prominence in a letter to *The Times* from the Marquess of Lothian. He points out the unwisdom of draining the capital resources from an industry which is rotting for lack of capital, to spend them for current revenue purposes mostly in the towns.

★

The operation of high rates and taxes upon good agricultural land, well farmed, is such that all profit is taken away. The further imposition of death duties means that landowners are reduced either to diverting money that should be spent on maintenance to paying interest on mortgages, or selling the land in the open market. Both these methods spell ruin to agriculture.

★

The other way out of the dilemma is, as has been suggested, to allow payment of death duties to be made in land of any sort, and not only in land "suitable for public purposes." Otherwise every effort made to save the countryside will be frustrated by a Government bent on spending money in the towns.

FITTINGS TO ARCHITECTS' OWN DESIGNS

I was talking the other day to the Editor (or, to be quite accurate, he was doing the talking, for I couldn't get a word in edgeways) about the difficulties which architects in this country experience in getting their designs carried out by manufacturing firms. Only a few weeks ago, an architect of my acquaintance was telling me of an experience which he had had in this very connection, and was comparing English procedure with French. He wanted his own design of light fitting, which was composed of decorative metalwork and moulded glass. The estimates which he got from British manufacturers were absolutely out of the question, since, as he only wanted about a dozen fittings and had to cover all the overhead costs of production, the price per fitting was ludicrous. He therefore sent to France for alternative estimates.

★

At this point one has, of course, to make every allowance for the lower wages and lower overhead costs; but, apart from this, at least one French manufacturer was very shrewd. He quoted a very reasonable price for each fitting. He also asked permission from the architect to be allowed to manufacture these fittings as standard articles, but guaranteed that they would not be placed on the market for a period of six months or a year—whichever the architect preferred. Naturally, the architect, as designer, not only had no objection to the manufacturer's pursuing this course, but, in addition, was rather flattered by the compliment to his design. He agreed; and thus got his own individual design produced at a reasonable cost, the manufacturer taking the risk of defraying the remainder of the overhead charges by large sales to the general public, who would buy the fitting as a standard product. It would be interesting to know whether this experiment has been tried with manufacturing firms in this country, and, if so, whether it has met with success or otherwise from the points of view both of the manufacturer and of the architect.

ARCHITECTS IN DEMAND IN SOUTH AFRICA

According to the annual report of the Union Public Works Department for 1928–29 (writes a correspondent in South Africa), great difficulty is experienced by the Department in maintaining a full staff of architects, in spite of repeated importations from overseas. The reasons advanced for this are that the number of fully-trained men is limited, the competition for such men in the profession strong, and the prospects outside attractive. But another very suggestive reason is recognized. "The situation has been met, to some extent, by improved grading and prospects in the Department," says the report, "but it should be understood that professional service of this kind must be remunerated with due regard to conditions obtaining outside. If salaries are pinched the country will not retain the men, and it will be necessary to consider the curtailment of a programme which, even now, meets no more than the bare minimum of need.

★

"The Department has during the last few years developed a system of training for young matriculated assistants and quantity surveying assistants, who obtain experience in design, specification work, drainage, structural engineering, and the essentials of quantity surveying, with supervision under capable assistants. Efforts are being made to ensure that they obtain experience not only on the æsthetic side, but on the business side as well. Moreover, the Universities of Capetown and Johannesburg have established full-time courses in the professional subjects; Pretoria University College has recently created a Department of Architecture and Quantity Surveying; and there has now been constituted, under the Architects and Quantity Surveyors (Private) Act, No. 18, of 1927, an Education Committee, which includes, among others, Professor Wheatley of Capetown University, and Professor Pearse of Johannesburg University. Durban, Port Elizabeth, and Bloemfontein will be centres for educational courses under University auspices."

IN IRELAND—NOW

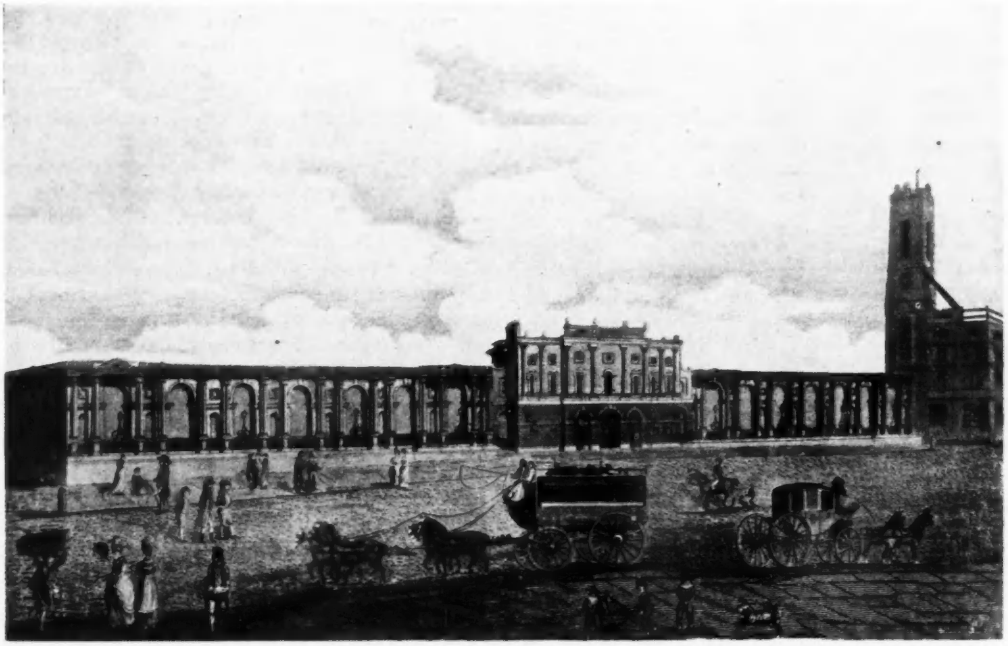
Let this be a warning to all builders who do not like to start a contract on a Friday. A certain farmer of Londonderry sought to build a house and employed a builder. He did not employ an architect because he thought he could do all that himself. So he made his own plans and wrote his own specification—on tea paper! The poor builder did his best. He put in bay windows when the farmer's wife found there were none on the plan; and he put a fire in the pantry because, as the farmer's wife said, "If you were down in County Antrim you would see everyone has them"; and he put in pitch pine all over; and a copper tank, and many other things. Then he could go no farther, for there was no more money. And the house was unfinished.

★

Owner and builder met again in Court, and further sorry details were divulged: how the windows had to be re-glazed because the hens ate the putty; how the men left the job for a month because there were potatoes to be dug; and, finally, how the poor builder had to give up business and look for other work. It is one of the most saddening of warnings, for, as the farmer said, it is very unlucky to start anything on a Friday.

AN OLD PRINT OF THE BANK OF ENGLAND

The rapid transformation of the Bank of England gives an added interest to this old print of the South Front, made in 1800. On the extreme right is Saint Bartholomew's Church, removed in 1841 and now remembered in the name Bartholomew Lane, which bounds the Bank on the east side. The two-storied entrance in the centre of the Bank front is Sampson's work, built in 1734. The east and west wings, with the blind arcade, were designed by Sir Robert Taylor and built between 1765 and 1782. Sir John Soane was appointed architect in 1788, but no part of his work is shown in the print. ASTRAGAL



Under this eighteenth-century view of the Bank of England, from the corner of Bank Buildings, is a note to the effect that the "elegant building (in front) was begun in 1771, by Sir Robert Taylor, and finished by him, 1783."

THE R.I.B.A. Council has now decided that the new building in Portland Place is to be the subject of an open competition for which all members of the R.I.B.A. or of any allied society are to be allowed to enter.

There are people who hold that the recent announcement making known this decision conceals one of the most momentous situations in the history of our profession. In their view the competition for the new R.I.B.A. building is no ordinary competition. It is an event whose after-effects will be felt in fifty years' time and more, for the good or ill of our art and of all those who practise it.

THE ARCHITECTS' JOURNAL concurs in this view, and invites its readers to take their part in the shaping of this great event. If you are interested in your own work and your career, you must needs be interested in the future of the profession. The future of the profession will be vastly influenced by the result of this competition. Will you help to make sure that the right result is obtained ? Will you help to safeguard your own interests and those of your fellows four years hence—and after ? Read what is written below. Record your views and your preferences now, for what you have to say may make all the difference between a lasting achievement on the one hand and failure and discredit on the other.

?

ARCHITECTURE ON TRIAL

The Year 1934— What Will It Bring Us?

?

OUR FIVE JUDGES
WANTED: *REASONED* SUGGESTIONS

THIS competition will be assessed by a jury of five men, to be appointed by the President, Sir Banister Fletcher. In making his selection, however, the President will be largely guided by the suggestions placed before him by members of the profession. In theory, the choice of the five men will be made by the President. In reality, it is in the hands of all architects who are members of the R.I.B.A. or of one of its allied societies.

A QUESTION OF VITAL IMPORTANCE

This question is so important that it is every man's duty to ponder it, and ponder it well. And, having pondered it, all those who have arrived at some definite conclusion should make known their conclusion. If they do not, they fail in their duty to their profession and to themselves.

REASONED SUGGESTIONS INVITED

The Editor of THE ARCHITECTS' JOURNAL would like to place the views of his readers before the President, and he invites each one of them to send him their *reasoned* suggestions on or before Friday, May 16. The form printed on page xlv of this issue may be used to this end. It is expected that the President and Council of the R.I.B.A. will discuss the composition of this jury some time in June. Their task will be lightened considerably if they have before them a number of seriously considered statements.

WHAT A REASONED SUGGESTION MEANS

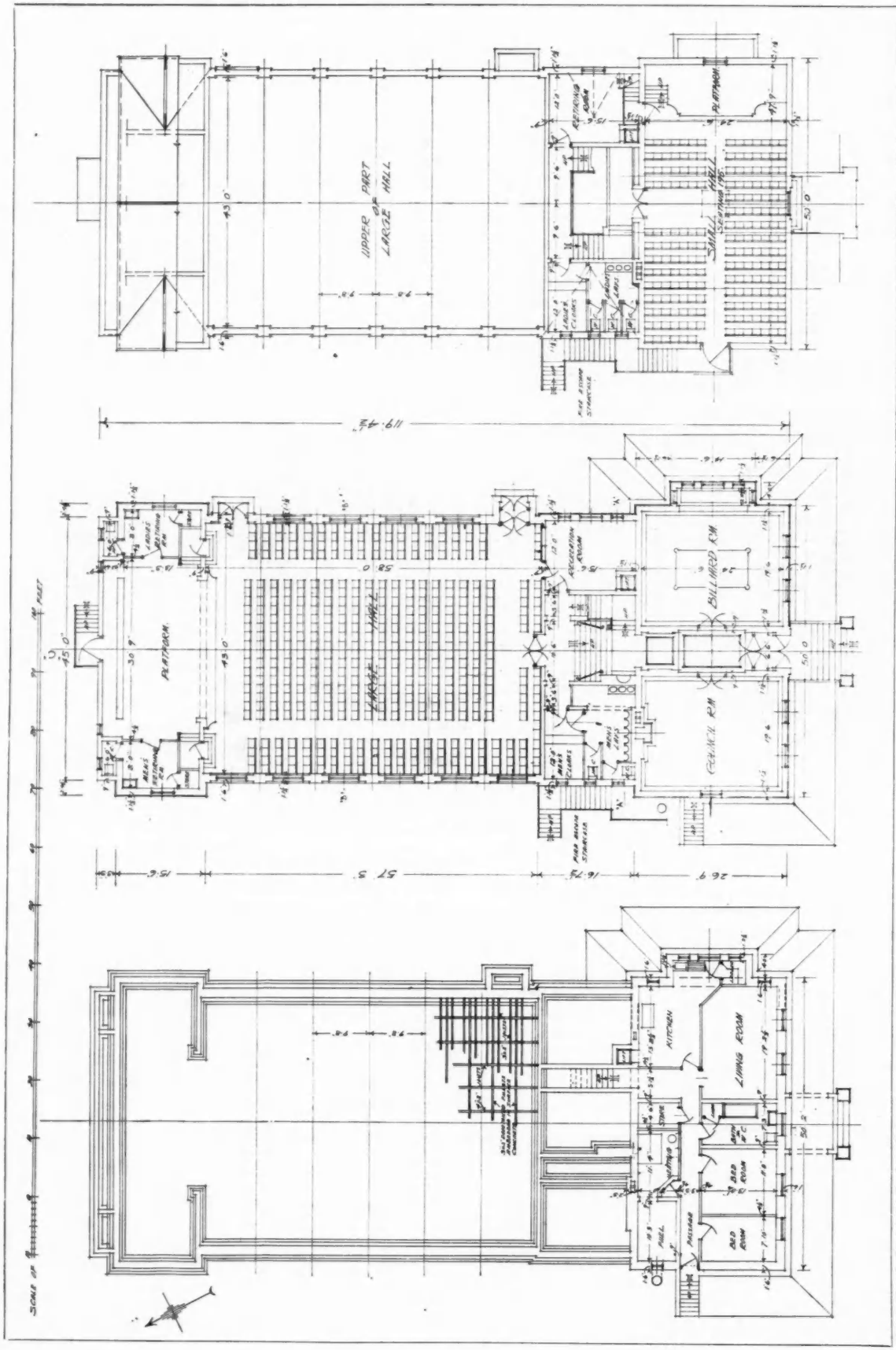
What do we mean by *reasoned* suggestions ? In our opinion a jury of five members is large enough to be really representative of the different trends of opinion that are found in architectural circles today. A jury of less than five could hardly manage this; the members of a jury of three, for example, would doubtless have to be selected on much the same sort of personal grounds that would govern the choice of a single assessor. With five it is different. There are more than five sections in the profession, or five types of architectural mentality. Some have put the figure at ten or eleven thousand. But with five assessors we do know that the most important ideas now current will be represented. It is even possible that extremes may meet and opposites be balanced. The possibilities of the number five are fascinating and all but inexhaustible.

WHAT IS YOUR CHOICE ?

What kinds of parties do you want to see represented ? What sort of attributes will you look for in this bench of judges to whom so much is being entrusted ? One elderly, experienced, slow to enthuse, accurate in his judgment ? One young, keen, plucky, willing to consider and even accept the unusual and untried ? Would you wish to see learning and tradition given their place ? Do you feel that the great provincial towns, and even the Empire, may have a point of view which differs from that of London men, and which should find expression on the jury ? You will have your views on all these matters, and on many others of equal importance perhaps. From Le Corbusier to the woman architect, your mind will range over the whole of modern theory and practice. Which five outstanding ideas or qualities will you select ?

WHAT TO DO

Pick the five. Put the ideas down in the appropriate spaces on the form which appears on page xlv of this issue of THE ARCHITECTS' JOURNAL. Then, and then only, fill in the names of the persons best capable, in your view, of representing these sections and of making a wise and sensible choice on their behalf. Cut out this form and send it to the Editor, THE ARCHITECTS' JOURNAL, 9 Queen Anne's Gate, S.W. 1, not later than first post on Friday, May 16. The views submitted by our readers will be analysed in THE ARCHITECTS' JOURNAL. They will, incidentally, throw a most interesting light on the present-day faith of British architects. But they are meant to be directly useful, and they will be placed before the President of the R.I.B.A. without delay. Do not think lightly of this question of the R.I.B.A. jury. It is one of the most serious the profession has ever had to answer.



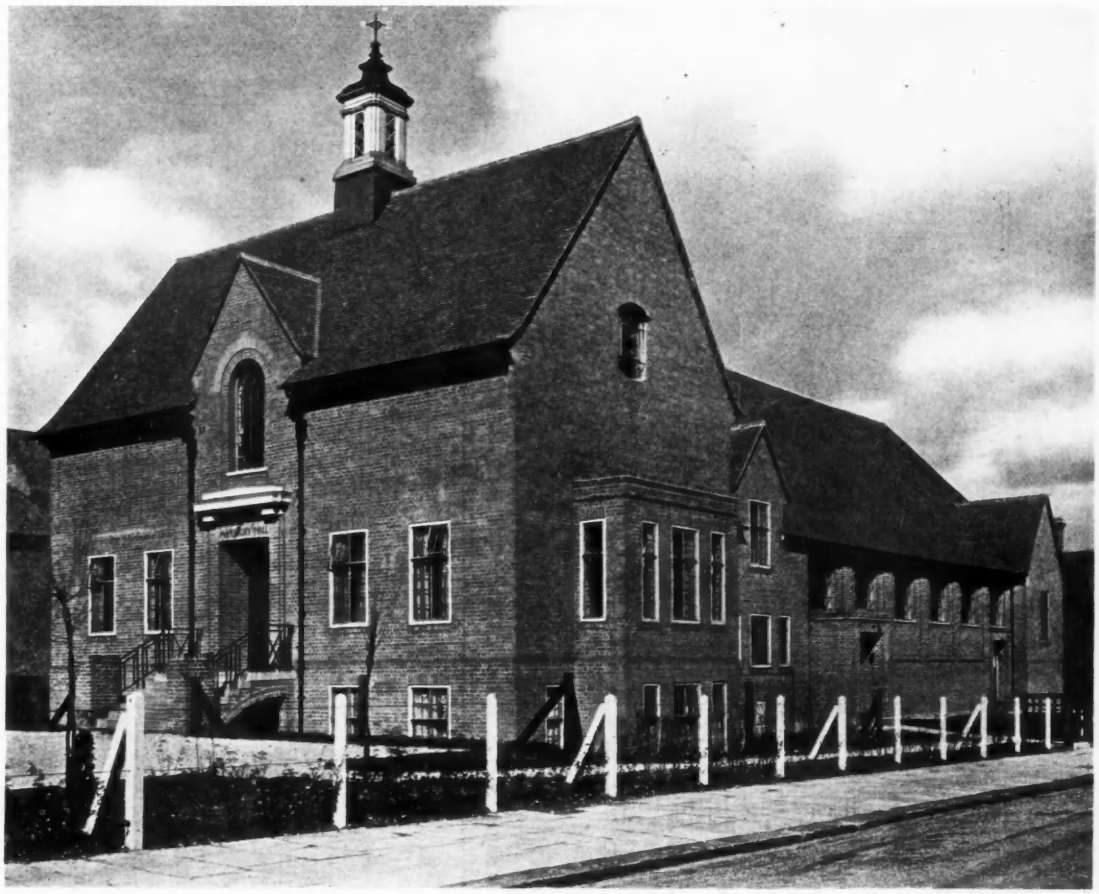
Christ Church Parish Hall, Brondesbury.]

[*By Lanchester, Lucas and Lodge.*

Basement, ground- and first-floor plans. *The building has been erected for the Parochial Church Council, Christ Church, Brondesbury, and is intended to be used for the presentation of plays and concerts, and for wedding receptions, dances and other social functions. The accommodation comprises a large hall, a small hall, Council, billiards and recreation rooms, and in the basement a self-contained flat for the caretaker.*

CHRIST CHURCH PARISH HALL, BRONDESBURY

DESIGNED BY LANCHESTER, LUCAS AND LODGE



A view from the corner of Willesden Lane (running to the left) and Coverdale Road. On the left of the main entrance is the Council room, and on the right the billiards room. The two doorways on the Coverdale Road side give entrance to and exit from the large hall. The small hall is above the main entrance, and is lighted partly from the semicircular headed window in the gable. Both halls are illustrated on page 713.

CHRIST CHURCH Parish Hall stands at the corner of Willesden Lane and Coverdale Road, and is used for the presentation of plays, operas and concerts, and for wedding receptions, dances, whist drives and other functions of a social character. It has been erected for the Parochial Church Council, Christ Church, Brondesbury. The exterior walls are of brick of a brownish tint, and the roof is covered with brown tiles. Metal windows are fitted. Above the main entrance are the words "Mapesbury Hall."

The principal apartment on the ground floor is a large hall capable of holding 500 people. This hall is 2,500 feet in area, being 58 feet long by 43 feet wide. It is two floors high, and is provided at one end with a stage about 30 feet wide by 14 feet deep. On the left of the stage is the men's retiring room, and on the right the ladies'. Each of the retiring rooms is provided with lavatory accommodation. This hall is the most important feature of the building, yet it is architecturally treated with the same simplicity and restraint that characterizes the other accommodation. The walls have a dado of blue-green, with a line of black to separate it from the cream walls above. The surrounds of the doors and the proscenium and base of the stage are also in blue-green. Stage hangings are in amber and brown, and the electric light fittings are green. The floor is constructed of timber to give the necessary spring for dancing.

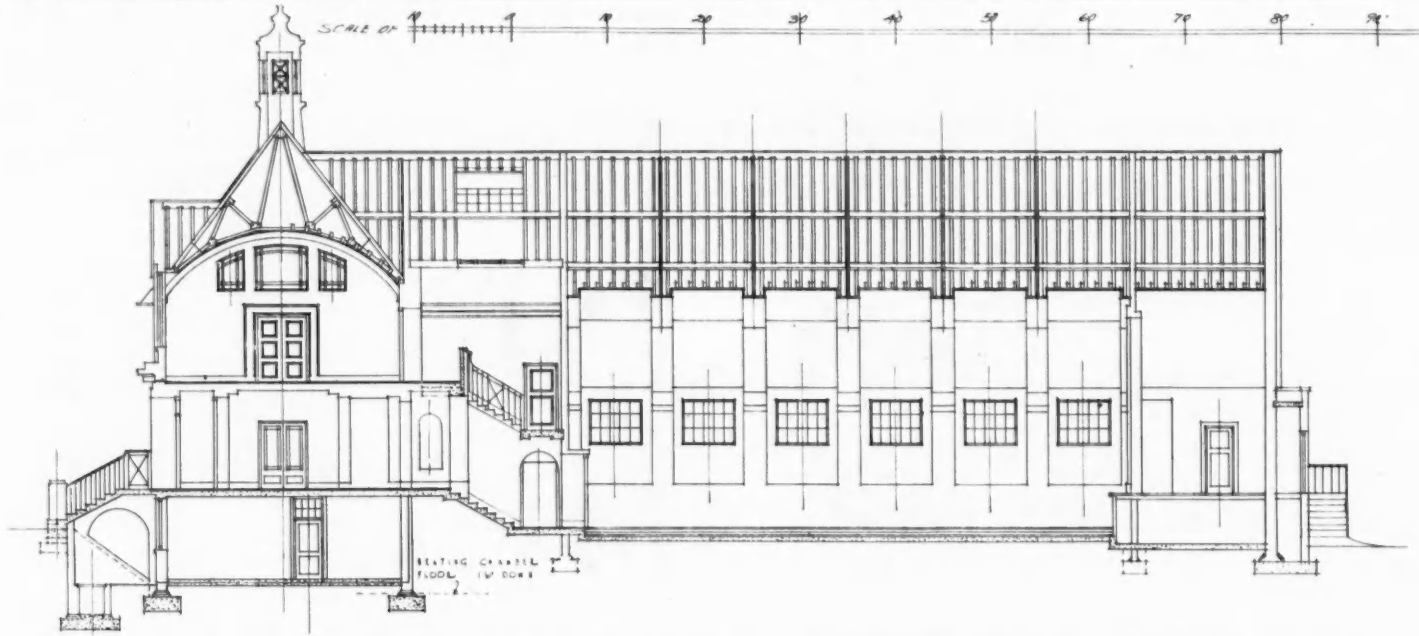
On the ground floor are also the Council, billiards and the recreation rooms. The Council and billiards rooms are each 24 feet 6 inches long by 19 feet 6 inches wide. The window sills and metal casements are blue-green, and the windows are hung with brown curtains.

A smaller hall, with seating accommodation for 200 persons, is provided on the first floor, immediately over the Council and billiards rooms. Here the walls also are in cream with a blue-green dado. The floor of this hall also is of wood.

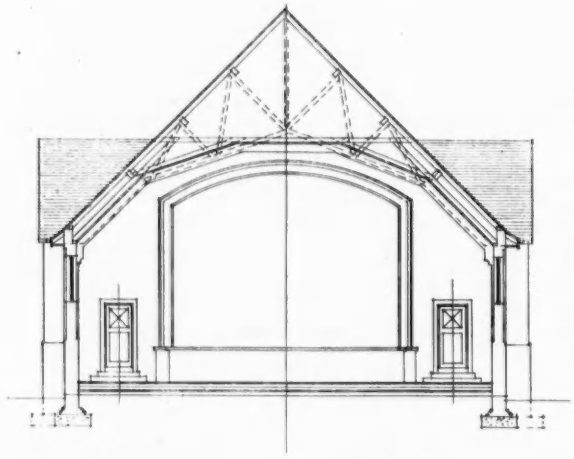
On the ground floor are the cloak room and lavatory for men and on the first floor those for the ladies.

In the basement is accommodation for the caretaker, consisting of a living-room, two bedrooms, bathroom and w.c. Here also are the heating chamber and the fuel store. The kitchen in the basement is used for the service of refreshments to both halls, and is connected by a service lift to the upper floors.

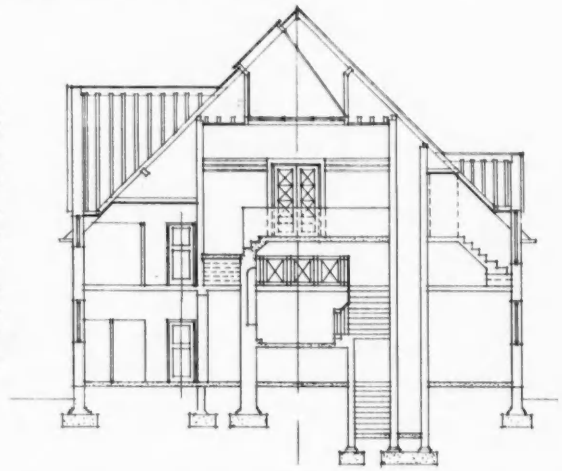
The entrance hall and staircases also have a blue-green dado with cream walls above. The internal joinery is in oak, and the floors, other than those in the large and small halls, which are of wood, are of hollow block construction, terrazzo and composition.



Longitudinal section. The main entrance, approached by the steps seen to the left of the drawing, leads into a hall, at the end of which, at a slightly lower level, is the large concert and dance hall. The small hall is on the first floor, beneath the turret.



Sections through the large hall looking towards the stage; and through the main staircase. On the left of the staircase on the ground floor are the men's lavatories, and on the first floor the ladies'. On the right are the service lift well, the recreation room on the ground floor and the steps leading from the small hall on the first floor to the retiring room.

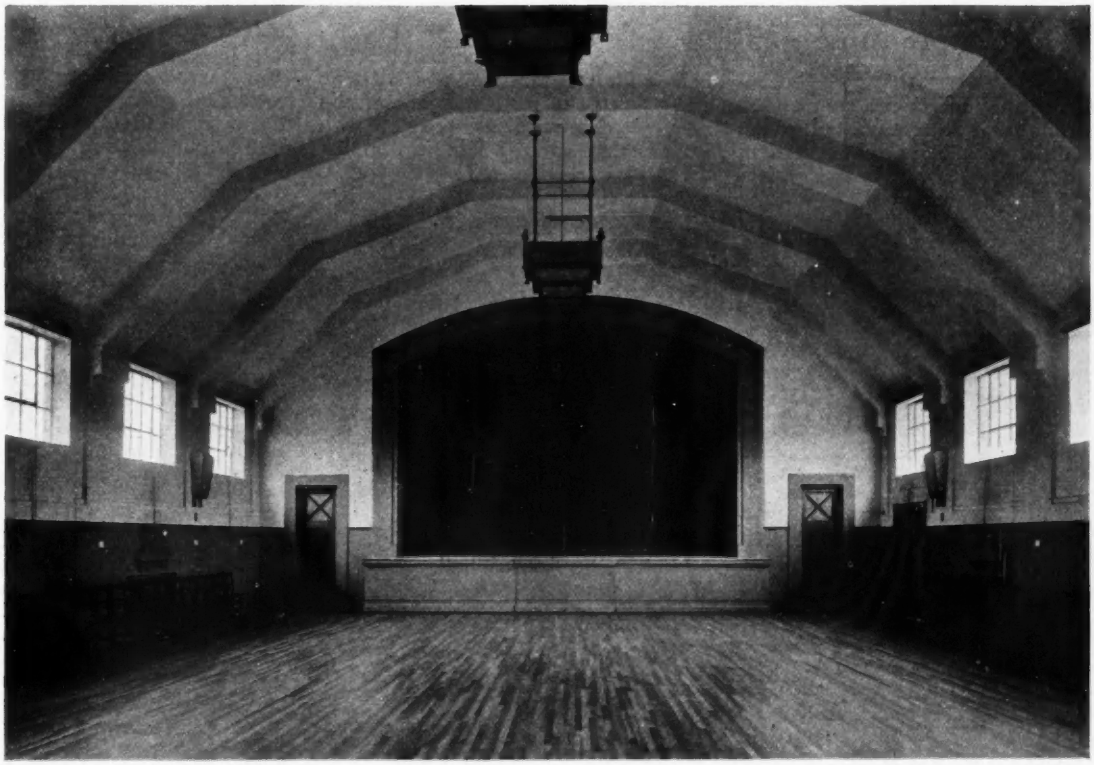


Christ Church Parish Hall, Brondesbury.] *[By Lanchester, Lucas and Lodge.*

[By Lanchester, Lucas and Lodge.



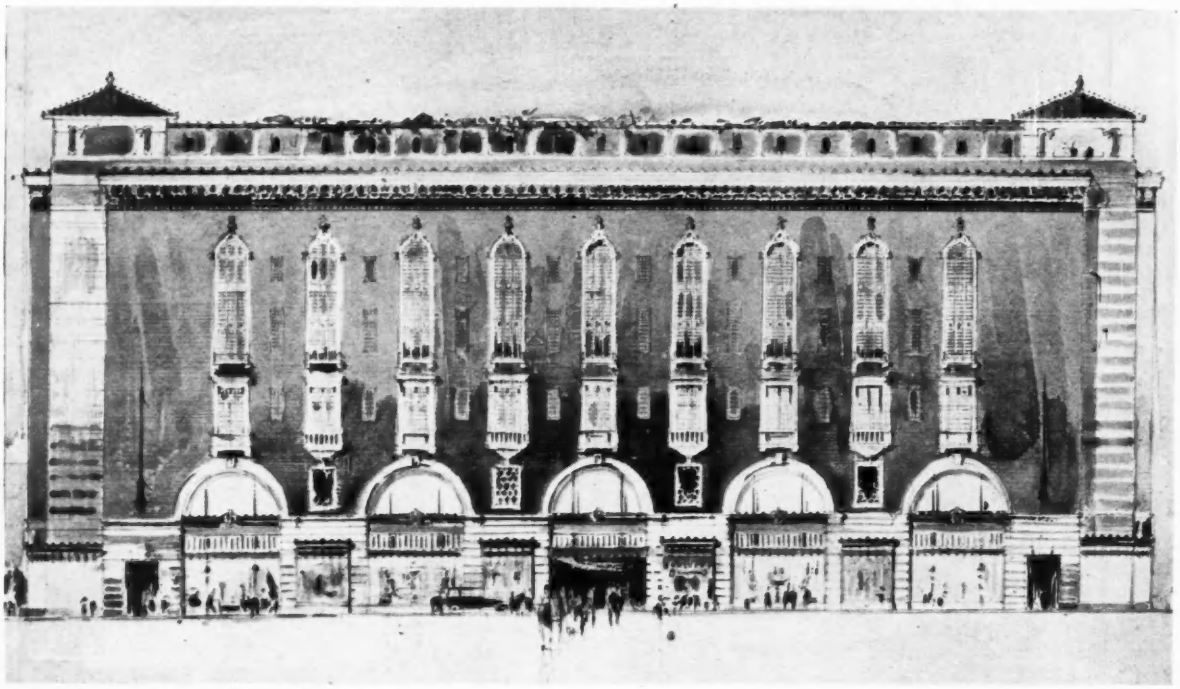
The small hall, looking towards the platform. It is decorated in blue-green and cream, and provides seating for 200 persons.



Christ Church Parish Hall, Brondesbury.] [*By Lanchester, Lucas and Lodge.*

The large hall, called the "Mapesbury Hall," accommodates 500 persons. The proscenium, the base of the stage, the door surrounds and the dado to the walls are blue-green. Stage hangings are amber and brown, and the electric light fittings green. The upper parts of the walls are cream The floor is specially constructed for dancing.

Christ Church Parish Hall, Brondesbury.]



The winner's perspective drawing of elevation to Kensington High Street. The conditions carried an honorarium of two hundred guineas, payable to each of the invited competitors.

THE LIMITED COMPETITION

Winning Architect: E. Berry Webber—Assessors:

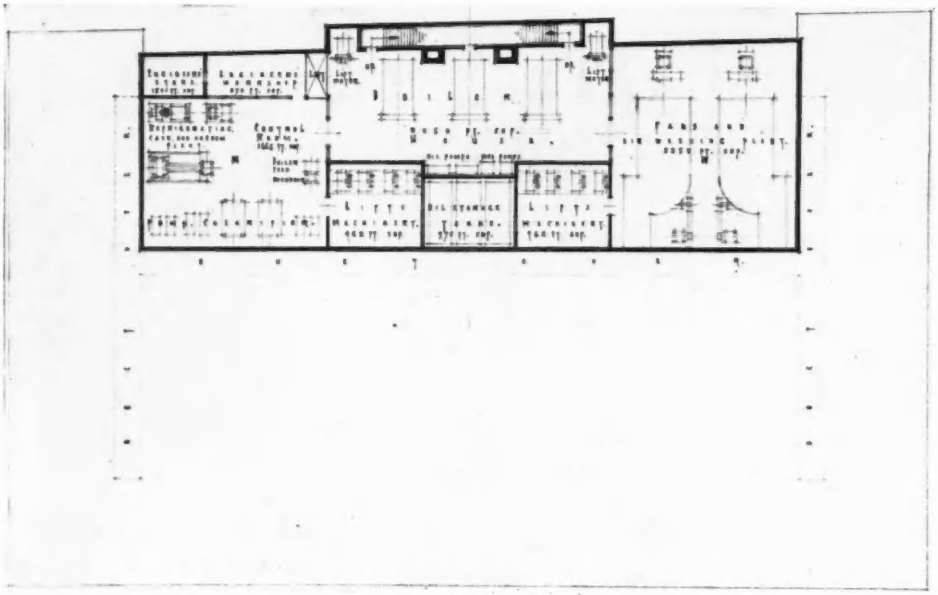
i: How It Arose

BY THE PROMOTERS

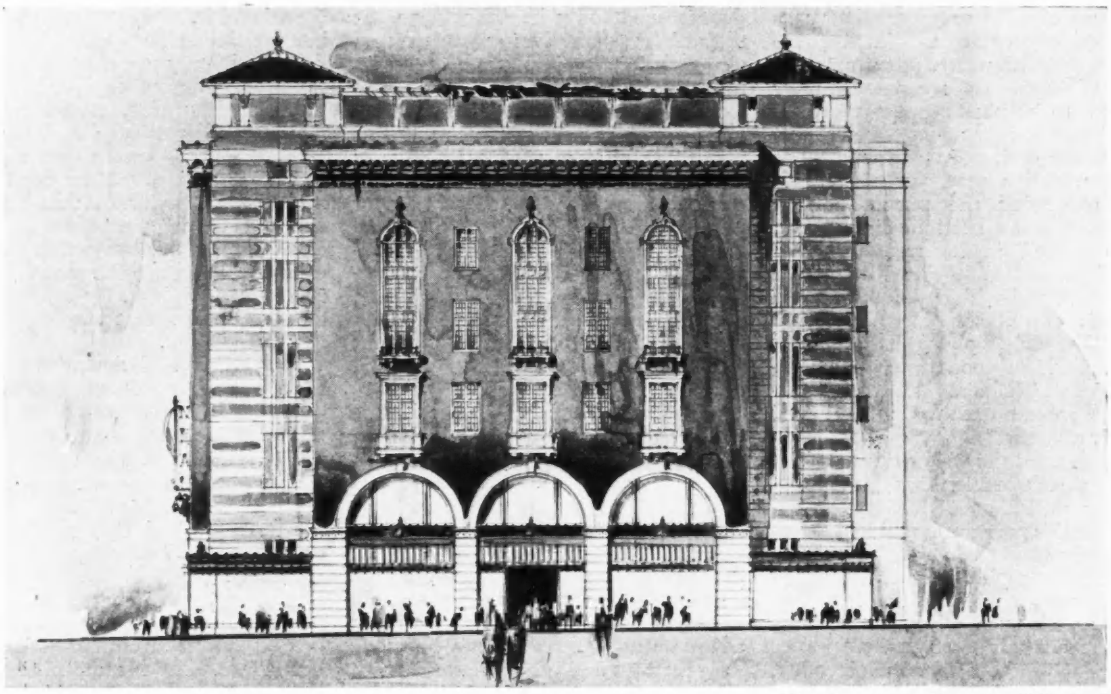
AT root the idea of this competition sprang from an appreciation of the possibilities of the site, about 210 ft. by 110 ft., on the north side of Kensington High Street, and also of architecture. A certain discontent was felt both with the practical and æsthetic embodiments of store requirements in many recent buildings, coupled with a belief that, given a fair field for the architect, intelligent study of the special problems involved could produce a notable result.

Very early, therefore, we were concerning ourselves with the right avenue of approach. But it was soon apparent that, in fundamentals, there was no common lore of store technique among architects, no school of thought and, therefore, no standard. This gave rise to the question : Had commerce refused adequate facilities and therefore stultified thought ? And if so, was there not much to be said in favour of tackling the job almost as a problem of research ? But that in turn would cut out the ordinary somewhat haphazard method of lighting on any one individual architect and pinning our faith on him. Why not, in effect, select a small panel of carefully chosen architects, invite them to make a scientific study of the question, and so pick the winner on known and substantial data ? In this way we came, with the help of our advisers, to the idea of a limited competition.

The next logical step was



The sub-basement plan of the winning design. Here are concentrated the various engineering services ; including heating, refrigeration and air-washing.



The elevation to Campden Hill Road. The five architects invited to compete included Robert Atkinson, Easton and Robertson (whose main elevation appears on page 729), H. Austen Hall, and P. J. Westwood.

FOR DANIEL NEAL'S NEW STORE

A. J. Davis; H. V. Lanchester; H. J. Neal.

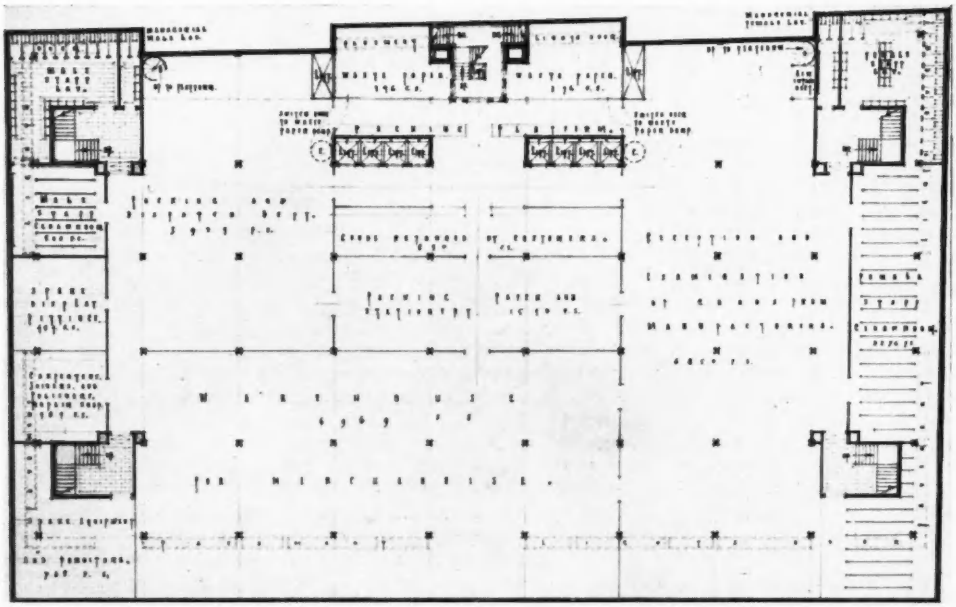
to crystallize our conception of ourselves; to set down, in black and white, an epitome of the company's traditions and present activities, together with a forecast of our aims. But this proved, in effect, a protracted struggle, and we have to thank our assessors in particular for their persistence in wrestling with us on this matter. Certainly we found it more fascinating to enlarge upon our somewhat amateurish list of qualifications for the ideal architect than to undertake the collar-work of affording assessors and competitors that clear-cut definition of ourselves which was essential to a successful scheme.

In our own minds we divided the problem into six sectors, as follows :—

(*a*) Elevation.
(*b*) Internal planning.
(*c*) Internal treatment and decoration.
(*d*) Works' organization.
(*e*) (Wise !) Economy.
(*f*) Personality.

Taking these in order :—

(*a*) *Elevation.*—Our candid opinion of store elevations—with the notable, but to us inapplicable, exception of Selfridge's, and irrespective of the circumstances which may or may not have prejudiced them—was that generally they are a dull lot; and although interest came from certain Continental and American examples, there was no direct guidance to be found there. But when we were compelled to become more concrete our assessors fixed us on the horns of a dilemma. Did we desire a modern elevation ? Yes, within reason. Was it to harmonize with our Kensington surroundings? Yes, but . . ! Rightly or wrongly, I think we were never quite convinced that the two



In the basement is warehouse space and cloakroom and lavatory accommodation ; but the main stairs extend down to it in case of public use at some future time.

C

needs were quite so contradictory as the posing of the dilemma was meant to suggest. At any rate, after many an hour of discussion we were finally allowed to word the paragraph on elevation as follows :—

" It is the desire of the promoters to obtain a design that, while emphatically expressing the purpose of an up-to-date store, shall be both broad and dignified in its treatment and refined in detail. The firm, while progressive and with definitely modern ideas, is of old standing and has a reputation for supplying its customers with articles of good taste and workmanship, which characteristics the competitors should endeavour to express in their schemes."

All the same, the writer has to admit to a sneaking suspicion that the assessors in their award gave a friendly side-glance at this paragraph and its preceding controversy when they referred to " a difficult problem involving many features which were, if not in actual conflict with each other, at any rate by no means easy to reconcile."

Before passing on from the elevation, perhaps it will be permissible to make two small exceptions to the self-imposed ban upon discussion of the merits of the actual schemes submitted. First, then, to the lay mind, the winner's design appears possessed of a scale and size which is quite noteworthy. And the second point; we were disappointed —admittedly there were exceptions—in the general handling of the show windows.

Our leading instruction under this head was, we think, a good one, as follows :—

" The promoters are averse from anything approaching an uninterrupted expanse of plate-glass front, and desire that structurally the windows should rather perform—although of course without undue emphasis—their natural function as an integral part of the elevation. Some variation in size and treatment, consistent with economy in girder spacing, is recommended, larger windows possibly alternating to some extent with others that will be confined to smaller and more intimate purposes."

Unfortunately this was followed by a further paragraph about arcading on the flanks which was apparently capable of misconstruction; but our criticism is not directed to this so much as to a lack of practical application to the whole technique of show windows. There was too little awareness of correct size — a three-dimensional problem—of shape, of accessibility by the window-dresser, and of positioning generally.

(*b*) *Internal Planning.*—It was important for us to ensure that planning ability was abundantly present in our architect, but we realized the corollary that it could only be brought to the test if we ourselves undertook a thorough inquiry into our commercial needs and then proceeded to express many of them precisely in location and indeed in square footage. The word " many " is used advisedly, as another valuable service performed by our two assessors was the drawing for us of a sharp distinction between matters requiring only a recommendation and those necessitating an instruction. For instance, in the case of lifts, we tentatively suggested the reasons for grouping and general location, but when it came to numbers, we laid down a rigid quota.

As was to be expected, the schedule of accommodation proved to be an exceedingly onerous, although interesting, task; and we had literally, and bit by bit, to plan the whole building in theory ourselves first, so as to ensure that the desired grouping of the departments on each floor did not entail a total footage that precluded good architectural handling. Further, adequate allowances had to be made for gangways and other " losses "; but the resultant plans that were submitted certainly justified this labour. As no questions on the instructions were raised by any of the competitors, we were perhaps not unsuccessful in our efforts.

(*c*) *Internal Treatment and Decoration.*—This category covers in our minds a very broad field. We were, for instance, severely critical of the constructional forests of stanchions that are only too evident in many stores, more especially American stores. We thought that the architect should first cloak the skeleton and then add his embellishments. (Incidentally, is the paint-pot a utensil that is nowadays forgotten ?)

Bearing in mind, therefore, the specialist character of our business, we particularly asked that the attraction of an intimate and personal atmosphere should be retained, and to this end we submitted concrete suggestions. Recognizing, however, that this might mistakenly lend encouragement to a " honeycomb " design, a warning was inserted to the effect that, in order to allow of elasticity for future changes and expansion, *constructional* supports should be limited in number.

Certainly, here again, we were asking for a course to be steered between Scylla and Charybdis; and widely different interpretations resulted, though it may be noted in passing that the logical practicality of the winner's mind seized on the wisdom of avoiding constructional, and therefore permanent, interruptions, while emphasizing the feasibility of securing interest by means of movable fittings and decorative treatment.

(*d*) *Works' Organization.*—This factor is axiomatic, and perhaps its chief interest lies in its upshot, in that we had reluctantly to eliminate two or three of the more youthful, and therefore less tried, names from the lists of candidates considered by us.

(*e*) *Economy.*—Some names again fell down on this test. More need not be said (except, perhaps, a half-humorous comment on the remarkable unanimity displayed by the competitors in their estimate of the cubic costs of their respective schemes. An innocent question : Has cost any meaning to the profession ?).

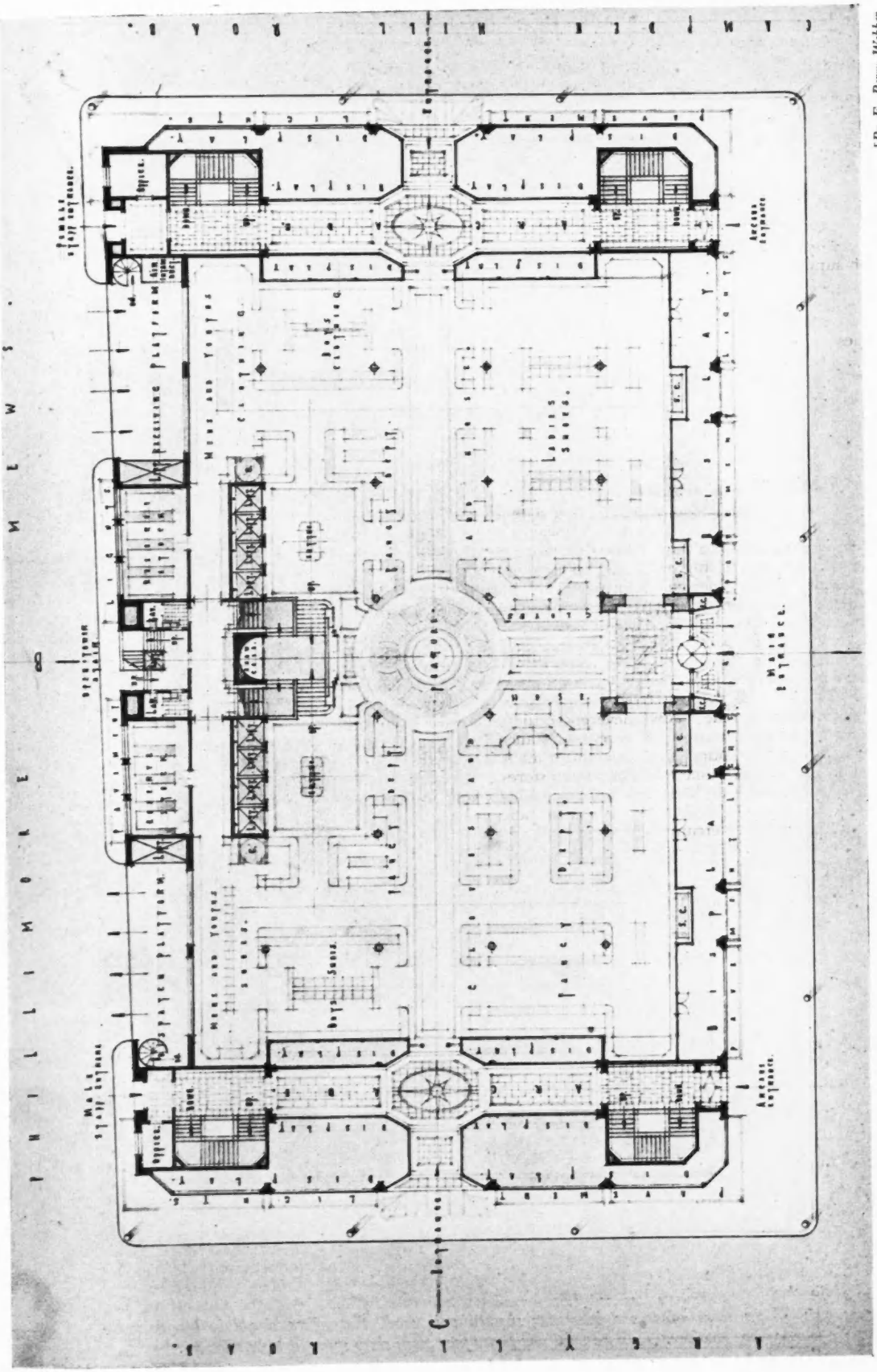
(*f*) *Personality.*—I am not sure if we were not regarded as somewhat unorthodox in the emphasis we laid on this question, but we had clearly in mind certain risks which we ran. To start with, a not unusual criticism of competitions is that they lead to impersonality. A limited competition can go part of the way to dispose of this danger, but we desired to go the whole way. This meant doing much more than taking the obvious course of getting first-hand opinions of proposed candidates. It meant, in short, the creation of an atmosphere, and throughout we were at pains to try and create the right atmosphere. Even at the last stage, for instance, when we had narrowed down our choices to a final selection, we asked that we mig interview each of these architects individually, so as to establish a friendly accord prior to sending out any invitations. Finally, when the competition instructions were issued, a separate covering note was attached giving, in layman's language, a pen-picture of our firm's aims and ideals, and this was followed by an informal luncheon to the five candidates, at which our managing director outlined something of the Daniel Neal traditions and previous history.

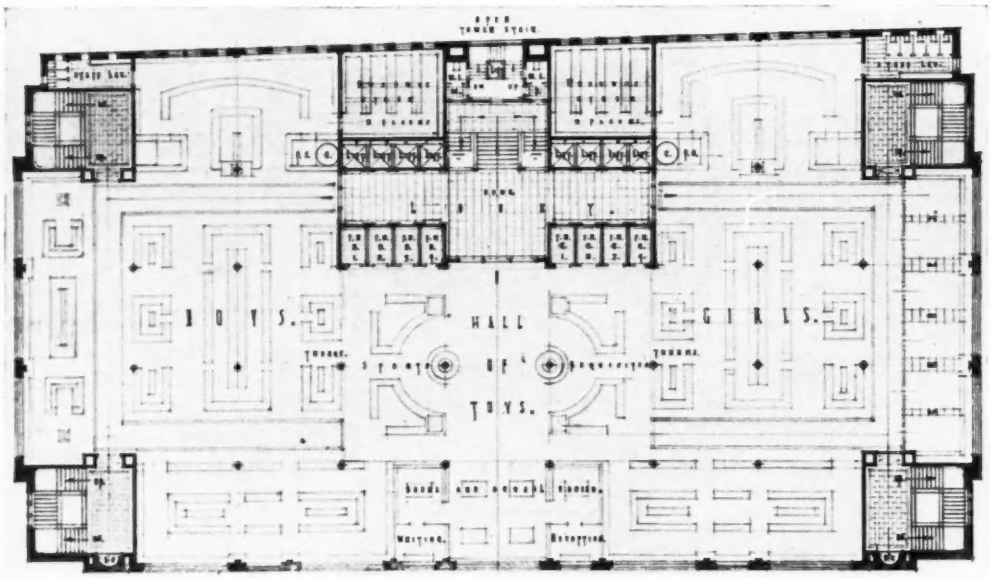
We have enjoyed the task and profited by it. We should do it again in like circumstances.

ii : The Winner's Report

A SUMMARY OF ITS POINTS

THE fundamental requirements internally for a modern store are adaptability, efficiency and attractiveness. The author has designedly placed " adaptability " first and foremost, because upon this necessarily depend the other essentials. It is considered that the site is not of such size as to warrant an attempt to plan any great central hall going up through several stories in the manner of some Continental stores. This type would immediately bring into action the L.C.C. requirement that the " cells " shall be cut off by vertical walls on each floor and, in addition, valuable floor space would be lost; also, the


PHILLIMORE MEWS
KENSINGTON HIGH STREET
Passenger Platform
Passenger Platform
Ladies
Gents
Mens and Youths
Mens and Youths
Boys
Boys
Goods Entrance
Goods Entrance
Goods Entrance
Goods Entrance
Offices
Offices
Offices
Offices
Stairs
Stairs
Stairs
Stairs
Lifts
Lifts
Lifts



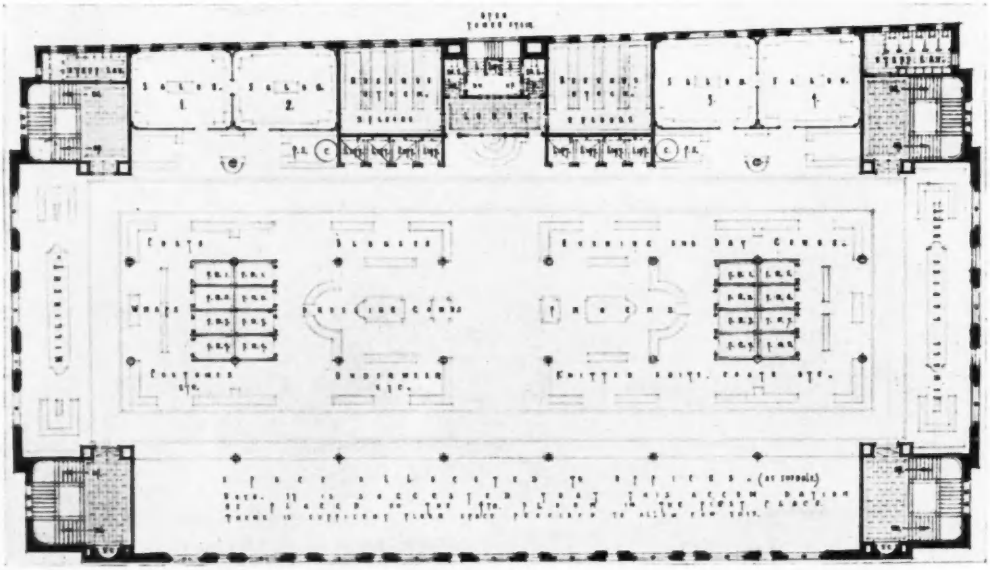
The first-floor planning is logical and symmetrical. First-floor windows on the main front are intended for the display of merchandise to catch the eye of passers-by on buses.

undamental principle of adaptability would be destroyed. That is why the internal arrangement of the store is worked as a simple grillage of steel supports at the most economical spacing for the site (approximately 22 ft.).

The general principle of the planning was to concentrate all the services in a central position. This central "nerve centre" seems inevitably to fall into the position indicated, at the north of the site, on which are located the transport facilities. Attention is also called to the arrangement of the reserve stock-rooms above each other, with intermediate levels in the same manner as a library "stack," thus practically doubling the amount of space available.

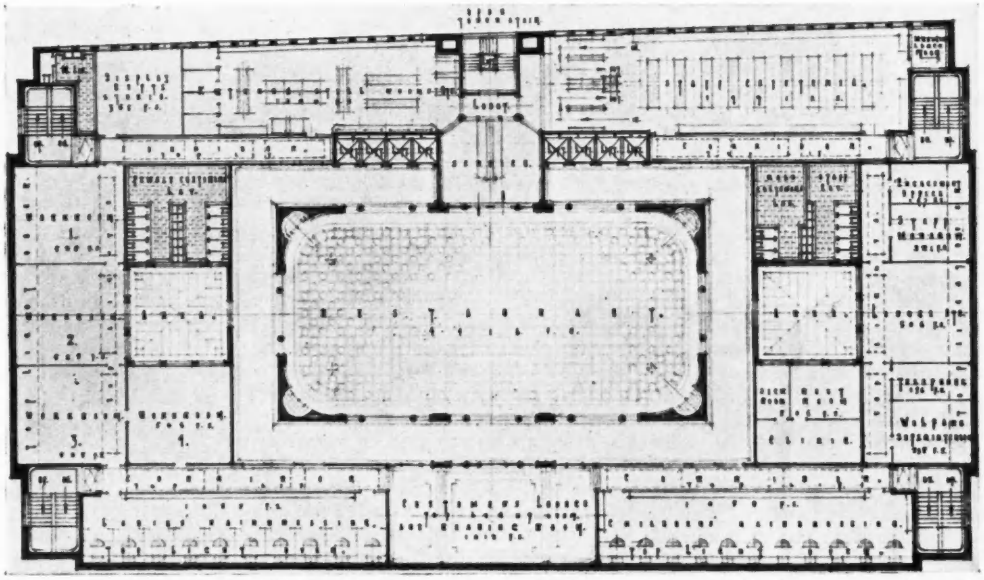
The ground floor is a different proposition from the others, because it contains the all-important show windows and main entrances. As required by the promoters, the former have been alternated in sizes so as to enable commodities of varying scale to be efficiently exhibited. Recessed arcading has been provided along the east and west fronts, apparent from the main thoroughfare—Kensington High Street. Should the proprietors in the future decide against the desirability of arcades these may be easily adapted to new requirements and converted into shop space. On the contrary, should they prove a success, it would be the simplest of operations to continue the arcade parallel to Kensington High Street.

The lifts, the most popular means of access, are so placed that customers traverse the shops to reach them and are thus obliged to inspect the goods



Daniel Neal's New Store, Kensington, W.: The winning design.]

On the plan of the second floor the interesting suggestion is made that offices should be placed on the fourth floor, not here. Both the third and fourth floor plans show space yet to be allocated.



The central feature of the fifth floor is the restaurant. Kitchens and staff cafeteria are opposed on the north front. There are also lounges, workrooms, a rest-room and a clinic.

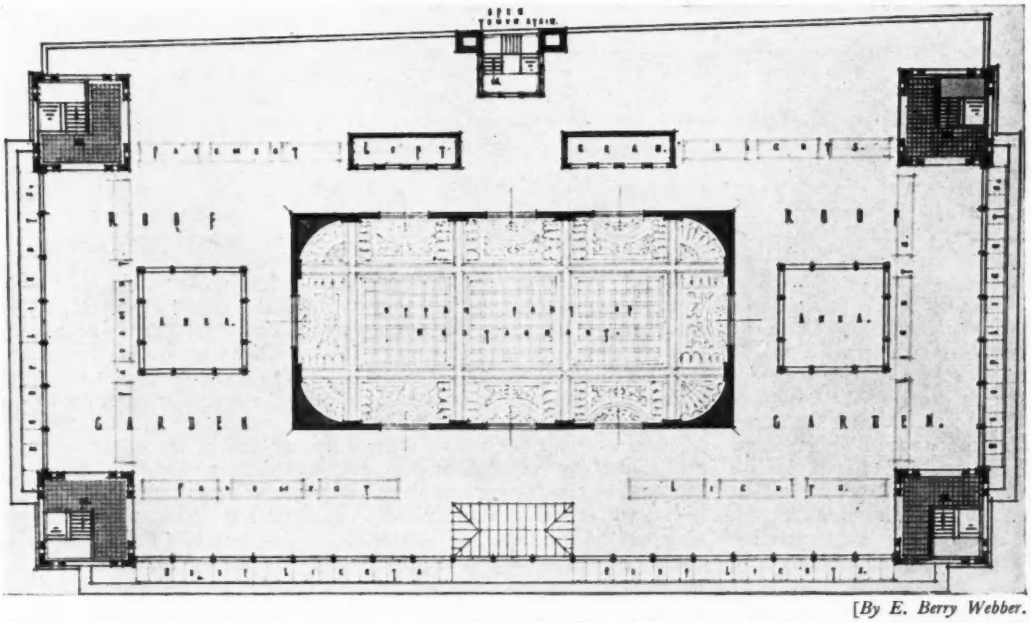
en route. The promoters expressed the wish that one stair should act as an attractive invitation to customers. This "exhibition" stair, open to the shop, could not be considered in the L.C.C. quota for fire-escape purposes. The author does not, therefore, consider it desirable for it to extend farther than the first floor; the four angle-staircases, however, go down to the basement, in view of future possibilities.

The author has attempted to deal with the internal decoration on the same principle as that of a museum; that is, to make the interior act as a *background* to the goods for sale.

The exterior is relied upon to express the character of the business as well as to attract fresh custom. Careful consideration has been given to the information supplied by the promoters, and several facts emerge. First, the business is an old-established one, the custom of a class that is greatly inclined toward the traditional. It would be easy to alienate it by producing the *bizarre* in an endeavour to be ultra-modern. Secondly, the site is not of such a size as will compete with the almost adjacent stores of the "universal provider" type. Thirdly, the business being invariably thought of in connection with the "Royal Borough," it is desirable that it should have the necessary character and dignity to rank it as a part thereof.

Here is a building that will for all time proclaim the character of Daniel Neal and Sons. Therefore, an attempt has been made to infuse it with a definite individuality.

In London, a floor area of approxi-



[*By E. Berry Webber.*

Included in the roof plan is space for a roof garden, surrounding the upper part of the lofty restaurant. At this level the area includes the projecting cornice; and pavement lights give light to the rooms below.

mately 25,000 square feet, with a height of 14 feet, of the shape required by this site, could not be adequately lighted with natural daylight. The only result would be to turn almost every object between the spectator and the external windows into silhouette. Therefore, it has been thought far more important to stamp the exterior with a strong note of character.

Certain *first-floor* windows are designed for display purposes, in view of the very large number of people who travel past the site on omnibuses.

The building is to be steel framed, of fireproof construction throughout, faced with a good rich brick, with Portland stone dressings, and having bronze shop fronts and metal windows. The pergola on the roof is to be in limed oak, finished to a silver-grey colour.

All the engineering equipment is placed, practically under the engineer's eye, in the sub-basement, and includes apparatus for supplying heat to radiant panels in ceilings; cleaning fresh-air supply; vacuum cleaning; and refrigeration.

It is very essential in a store of this description that the floor be kept clear of pipes and radiators, and it is proposed to fix radiant panels (arranged to suit the architectural features) in the ceilings against the outside walls, supplemented by such a number as may be necessary at other points, so that part of the heat is radiated downwards and part conducted through to the floor above. Hot water will be supplied to all necessary points in the building.

From a financial point of view the stock must be kept very clean. The only way to ensure this is to free entering air from dust and dirt, and this, combined with vacuum cleaning, should give ideal conditions.

If comfort is to be maintained at all periods of the year, it is necessary to install refrigeration as part of the ventilation system. It may be pointed out that such refrigeration is very considerable compared with the small amount required for such purposes as keeping furs in good condition and kitchen requirements.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Ancient Buildings and Vibration

THE question of the damage caused to ancient buildings by vibration from heavy traffic was discussed last week by the Standing Committee of the House of Commons which is considering the Road Traffic Bill. Major Glyn, a Unionist member, moved an amendment to provide that a university or college or other important educational establishment, or the owners or guardians of any ancient monument under the Ancient Monuments Consolidation Act, 1913, should be authorized to apply to the Minister of Transport for restriction of traffic or any particular class of traffic. He said that not only the ancient universities but also modern universities were apprehensive as to the damage that might be done to valuable scientific instruments if the present vibration were allowed to continue. The University authorities all stated that unless there were restrictions imposed, their buildings and their work might be rendered useless as a result of heavy traffic passing their doors. The amendment which he moved bore the name of all the University members, who had been asked by the Universities to raise this matter. The heavy traffic which now passed through the High Street of Oxford made it almost impossible for lectures to be given in a great many of the lecture halls which had been used for centuries for that purpose, and the traffic did damage in many cases to the fabrics of the Colleges.

Major Hills said it was of very great importance that University and scholastic authorities should be given the right of access to the Minister of Transport. The town authorities might not always agree with the University authorities, and in his days at Oxford they were often at variance. Large sums were being spent on education, and the effect of heavy motor traffic was to detract from the educational value of the Universities.

Mr. Morrison, the Minister of Transport, expressed sympathy with the purpose of the amendment, but he found that there would be very great difficulties in the way of giving effect to it. Neither existing powers nor those proposed in the Bill would give power to stop traffic because of vibration of buildings or injury to amenities. He could only restrict the use of the road in the case of vehicles which would be dangerous to their occupants or others, or if a road were unsuitable to particular types of vehicles. It was difficult to get away from the highway authority; but, of course, it was open to anybody to communicate with the Minister at any time. University authorities or guardians of ancient monuments could communicate with him and say that the situation was very serious for them, and the matter could be taken up with the local authorities. The real remedy for vibration was for the local authority to reconstruct the highway, and in the case of Oxford the remedy was the construction of a by-pass road and a new bridge.

Vibration could be met, as he had said, by proper highways and by regulations which required pneumatic tyres; but he wished, if he could, to find words to meet the question of amenity and noise and danger to ancient buildings. He found great difficulty in this matter, but he had every desire to meet the points which had been raised in the amendment, and he undertook to think it over carefully before the Report stage.

On this understanding, the amendment was withdrawn.

Town Planning

Mr. Greenwood, the Minister of Health, in bringing forward the Ministry of Health Estimates last week, said with regard to the allied question of town planning, there were at present eighty regional committees, of which sixty were advisory and twenty were executive. There had been an increase in the number of executive regional committees, and he desired to emphasize the importance of proceeding by way of the executive committee rather than the advisory committee. Reports had been received from some of the more important regional committees, and particular interest attached to the work of the Cambrian Regional Planning Committee, which included a large part of the Lake District.

It was of interest to note, in view of the movement in favour of national parks, that a scheme was under consideration there which, if carried to success, would, he believed, permanently save to the nation the beauties of the Lake District, and would do something to control in an orderly fashion any future development that might take place. Substantial progress had been made in town planning in the course of the year.

At present, town planning schemes were in operation or proposed, covering, in England and Wales, over 5,417,000 acres. A year ago the number of acres covered by schemes was about 4,450,000, so that in a year they had added 1,000,000 acres to the areas which could look forward in the future to scientific and orderly development. But a good deal still remained to be done. Existing powers did not permit either the State or local authorities to do what was desirable in the sphere of town planning. The Government contemplated comprehensive legislation on this matter, and his Department was now, and had been for some time, in consultation with members of some of the more important organizations concerned. Their help had been extraordinarily valuable, and it was desirable that, before detailed proposals were put before Parliament, they should get the views of people of experience in this extremely important problem.



ENGLISH PRECEDENT No. 114

HOUSE IN MILTON REGIS, KENT

Though little more than a cluster of streets on the outskirts of an industrial town, Milton Regis was once a flourishing port. Within a narrow compass are houses of the sixteenth to the nineteenth century.

This very informal piece of work, bespeaking a certain remoteness from the fount-head of classical inspiration, is closely related to the neighbouring timber-framed houses that precede it in date.

[E. MAXWELL FRY.]

CORRESPONDENCE

MODERNISM AND THE MAN IN THE STREET

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Finding myself interested in one of the buildings published in your issue for April 30, I bought a copy of your paper and read it with the very greatest interest.

I am writing because I am somewhat surprised at your view of the ideas of "the man in the street" in respect to modern buildings, as set out in some notes by Astragal. Surely you are out of touch with the real views of enlightened wanderers through our streets; in fact, your writer gives one the feeling that he is simply quoting the ideas of the labourer and the newsvendor, who forgather so often under these large modern buildings.

I should say that the ordinarily enlightened person is greatly impressed by this new movement in architecture. Its simplicity, its expression in its construction of utility and purpose, its recognition of the needs of daylight in all rooms, and the charm of well-proportioned wall spacing have made the ordinary man see more than anything, I imagine, what architecture means, and what it can do for the community.

Until this new movement came into being, to the man in the street architecture meant simply the reiteration of ancient symbols more or less cleverly handled, and any idea of a plan expressed in the contour and façades of a building was absolutely an unknown factor.

I could write at considerable length on this subject, as meeting a large number of men and hearing their views, I feel you are unjust and unfair in your comments, and your contributor should know that the layman is far more enlightened and quick to understand than he imagines.

"QUITE THE ORDINARY MAN IN THE STREET."

[If the views expressed in this admirable letter were as ordinary as we should like them to be, the modern movement would make more headway in this country than it is doing at present, and architects would meet with less opposition in trying to achieve those new virtues of "simplicity," and "expression in construction of utility and purpose." "That urgent matter of personal taste," and the tricks of popular celebrities like Mr. Epstein, are still allowed to obscure far too much of the real message of modern architecture, and to discourage and embitter its apostles.

Will architect readers whose strivings after modernity have met with genuine appreciation from clients and others drop us a line telling us of their experiences? We would like to hear about more people like this "quite ordinary man"; notes and recollections will be welcomed, and will be printed on this page during the next few weeks as received.—ED., *A.J.*]

SEA SALT AS A CAUSE OF DECAY OF LIMESTONE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—We have read with interest the letter from Mr. P. W. Barnett, of the Building Research Station, published in your issue for April 9, and are glad to note that he is in general agreement with the opinions expressed in our article, which appeared in THE ARCHITECTS' JOURNAL for March 19 last.

It is quite true that huge quantities of Portland stone have been used in buildings in this country which have shown no signs of that type of decay under review (i.e. that accentuated by salt), and this we should expect, not only on account of the varying physical structure of the stone, but from the manner in which random blocks are cut up.

Like the workers of the Building Research Department, in all our observations we have found that decay due to the presence of sea salt is localized; and one of us (A. R. W.) began observations in regard to this kind of decay over six years ago. We feel, however, that at least for the present we must adhere to our opinion that "capillary head" or other capillary phenomena are the chief causes of local concentration of salt; in our observations we have come across, at times, only comparatively small patches in large blocks of stone suffering from the type of decay under review.

We can see no reason why a decaying stone should not infect a contiguous stone; it is quite possible that capillary action or similar phenomena may cause some flow of salt in solution from the infected to the non-infected stone. Whilst "capillary head" is a convenient term to use for a certain capillary phenomenon, we consider that the whole subject of capillary action in regard to stone and similar materials has not been so thoroughly investigated as to allow dogmatic opinions to be formed.

Whilst we agree upon the possible contamination of Portland stone by sea water, accidentally, or owing to the situation of the quarry, we had one case through our hands in which the quarry owners definitely stated that it was impossible for the stone to come in direct contact with sea water, accidentally or otherwise.

We are in cordial agreement with the last paragraph in Mr. Barnett's letter, with reference to the fact that, in their own interests and in the interests of their customers, the stone firms concerned would be well advised to take immediate steps to see that no stone is put on the market which has, from any cause, been in direct contact with sea water.

ARTHUR R. WARNES
D. NORTHALL-LAURIE

FREE EMPLOYMENT ANNOUNCEMENTS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I am directed to thank you for your decision under this heading as my Council wishes to recognize your effort to assist in the solution of the employment problem.

The leading article in your issue for April 16 touches upon the uneconomical position of many salaried men and the problems arising thereby. My Council desires me to point out that these questions have received the close attention of the A.A.S.T.A. for over ten years with considerable success. The status and remuneration of salaried men have been improved, although much remains to be done.

There is also a need for greater recognition on the part of salaried men of the fact that only by organized action can their various problems be solved.

While congratulating you on your effort, I may remark that all the free employment registers in the country will not meet the difficulties arising from the state of the profession today. These new conditions need more direct attention, which they are receiving from the A.A.S.T.A.

A. SEYMOUR REEVES,
Secretary, Association of Architects, Surveyors and Technical Assistants.

[We trust Mr. Reeves did not seriously suspect us of believing that employment registers (like the one which appears in the JOURNAL this week) will suffice to "meet the difficulties arising from the state of the profession today." We emphatically believe no such thing. The object of the JOURNAL scheme is simply to lessen some of the evils that spring from what our leading article called the "seasonal and desultory" nature of ordinary architectural practice. It is even possible (though this we cannot tell) that from these evils it may be able to extract some little good.—ED., *A.J.*]

LAW REPORT

A SUCCESSFUL APPEAL BY A BROADSTAIRS ARCHITECT

IN a King's Bench Divisional Court on Wednesday, April 30, Justices Talbot and Finlay heard an appeal by Mr. William George Shipwright, an architect, of Broadstairs, from a decision of the official referee, Mr. G. A. Scott, in favour of Sir H. Lidiard, of Great James Street, London.

The appellant sued the respondent to recover £1,537 for fees as an architect in connection with the development of an estate at Woking. Appellant was to receive 2½ per cent. on the cost, and his case was that after twelve houses had been erected, respondent refused to go on with the scheme on the ground that the appellant had used Aerocrete as building material in the place of bricks or stone. The respondent in his reply alleged that the houses shrank, that there were cracks in the walls owing to the unsuitability of the material, but that it was advised by appellant as suitable.

The official referee thought that the architect had proved his retainer for the whole scheme, and when the building owner abandoned it the architect had been prevented from getting his remuneration. But then there arose the question of alleged negligence by the architect, who recommended an aerocrete material, which went wrong, and the official referee thought that the architect was not exercising proper skill as an architect in seeing that the materials used should not cause injury to the building owner. He found the architect guilty of negligence, but not such negligence as would entitle the building owner to say he would not entrust him with any further operations. He gave judgment for the building owner, with costs, and a declaration that the architect was liable to the building owner in negligence, but the builders and the Aerocrete Company agreeing to do what they could to put the places right and make good the cracks, etc., no further order was made.

Plaintiff now appealed from that decision, and his appeal was argued by the Hon. Stafford Cripps, K.C. Mr. Eales, K.C., appeared for the respondent.

The Court allowed the appeal, held that Aerocrete was not an improper substance to use, and that the architect had not been negligent, and entered judgment, with costs, for Mr. Shipwright on the claim and counterclaim, and further directed an account to be taken as to the amount due to the architect.

Mr. Justice Talbot, in giving judgment, said it would be a very serious matter for an architect if he were obliged to superintend the process of manufacture of material to be used in buildings for which he was architect and to satisfy himself that the process had been properly carried out. His lordship did not think that it had been proved that Aerocrete was an improper substance to use in buildings of this character. The whole of the evidence was that, if properly treated, Aerocrete was a proper material. In his opinion it had not been proved that this material was in fact unsuitable, and therefore it had not been proved that the architect was negligent in advising its use. There was no evidence that Mr. Shipwright had not the professional skill he proposed to have or that he in any way acted negligently. The case for the respondent wholly failed and judgment must be entered for appellant, with costs.

Mr. Justice Finlay concurred.

READERS' QUERIES

WATERPROOFING PREPARATIONS

F. G. T. writes: "*Can you give me any information regarding waterproofing liquids and preparations for brickwork? From an article in the* Encyclopædia Britannica, *it appears that there are compounds containing chiefly paraffin wax, compounds with silicates as their chief ingredients, and one method which combines a form of silicate with a subsequent application of chloride of lime. It is suggested that either the last-named method or the previous one results in considerable 'efflorescence' afterwards. The Szerelmey people state that there is no silicate in their fluid. In the midst of these statements I should like to know, if possible, what patent materials contain, and which of the various available processes is likely to result in waterproofing defective brickwork permanently; what is the nature of the 'skin' which all good brickwork is stated to acquire,* i.e. *whether of a mechanical nature or of vegetable origin, and whether any or all the waterproofing compounds interfere with this 'skin'?*"

[Following are our expert's reply to the above inquiry, and also the opinion of the Director of Building Research.]

The inquiry, evidently, is for a transparent and colourless preparation, and silicates, such as that popularly known as waterglass, seem most promising, if sprayed upon the brickwork when it is very dry—the spraying being done under considerable pressure. If the brickwork, and especially the mortar joints, were brushed over first with a wire brush, the fluid would penetrate better. It should be remembered that the mortar joints are usually the weak points of penetration by moisture. As they wear by weather, their surfaces crumble and the liquid sprayed on them would come away also. I cannot imagine any permanent treatment, except a fresh surface, as by rendering with cement containing one or other of the proofing preparations.

The natural "skin" which brickwork acquires is of lichens. The presence of these would reduce the efficiency of waterproofing fluids because they would interpose between them and the brickwork. The waterproofing effect of such natural "skins," in my opinion, has been overrated.

Annual brushing and spraying with a silicate solution in hot weather in September is probably the most hopeful course. N. L.

In requiring advice as to remedial measures the condition is often imposed that the treatment applied shall not result in serious change in the appearance of the wall. This involves the use of materials of the colourless waterproofing type, of which a very large number are on the market under proprietary names; it should be recognized at the outset, however, that the best of these preparations possess limitations in practice and cannot be expected to provide an infallible cure in every instance. A number of reports have, in fact, been received where such treatments have failed to prevent penetration.

Colourless waterproofers depend for their efficacy on the water-repellent properties of films of metallic soaps, fats or waxes, and in certain cases it is attempted to fill the pores of the material under treatment with insoluble compounds joined by the interaction of solutions applied to the wall, or by reaction of the solutions with constituents in the wall, or by reaction with atmospheric constituents. It has not been possible to carry out experimental work on all the numerous waterproofers available, but certain treatments have been taken as representative of the various types and, as a result of experiments on them, the following conclusions have been reached:

In applying such materials to a wall it is desirable to consider the behaviour of moisture which comes in contact with porous materials such as masonry or brickwork. Solid walls tend to absorb water by capillary force, the magnitude of this force being dependent on the extent to which the pores of the material are wetted by water. Certain colourless waterproofers, depending on the water-repellent effects of soaps, fats or waxes,

prevent the capillary movement of water, not by closing the pores, but by altering the contact angle between solid and liquid surface, and may actually reverse the direction of the capillary force. In addition to the capillary force, however, the hydrostatic pressure acting on the liquid must be considered. A high wind pressure may be sufficient to exceed the opposing capillary forces exerted by a treated surface, which will then be quite ineffectual in preventing the penetration of rain.

There can be little doubt, in certain cases where exposure conditions are not very severe, that a colourless waterproofer may afford a useful degree of protection for a limited period, but will probably require renewal at regular intervals. The number of variable factors to be taken into account, however, precludes the possibility of assurance of success in any particular instance.

Experiments have shown that treatments with interacting solutions do not completely fill the pores, so that capillary forces are still operative. The general conclusion reached is that such treatments are less efficient as waterproofers than the water-repellent type and, as F. G. T. suggests, there is the danger of the formation of efflorescence in certain cases.

With regard to the formation of a surface "skin" on brickwork, this, if it exists at all, is probably due to the crystallization of water-soluble material derived from the bricks or mortar in the surface layer, on evaporation of moisture by which it was conveyed to the surface. Such skins are more often than not a source of weakness, and are mainly responsible for deterioration manifested in the form of blistering or flaking.

DIRECTOR OF BUILDING RESEARCH

BLACK ROOFING SLATES

F.R.I.B.A. writes: "*Can you inform me where it is possible to obtain black roofing slates. I am aware of the dark blue-grey Welsh slate, which is sometimes sold as a black one, but am told a really black slate was once produced in Ireland.*"

[The Editor invites readers to reply to the above inquiry.]

COMPETITION NEWS

THE competition for laying out a portion of the Stokes Bay area as a pleasure resort with public walks and grounds, for the Gosport Town Council, has been adjudged as follows:

First place, Messrs. Bakers, of Wolverhampton.

Second place, Maxwell M. Hart, of London.

Third place, E. J. Tuck, of Gosport.

The winning design is illustrated on this page.



The design, by Messrs. Bakers, of Wolverhampton, placed first in the competition, promoted by the Gosport Corporation, for the layout of Stokes Bay as a pleasure resort. Second place was secured by Maxwell M. Hart, of London, and third by E. J. Tuck, of Gosport.

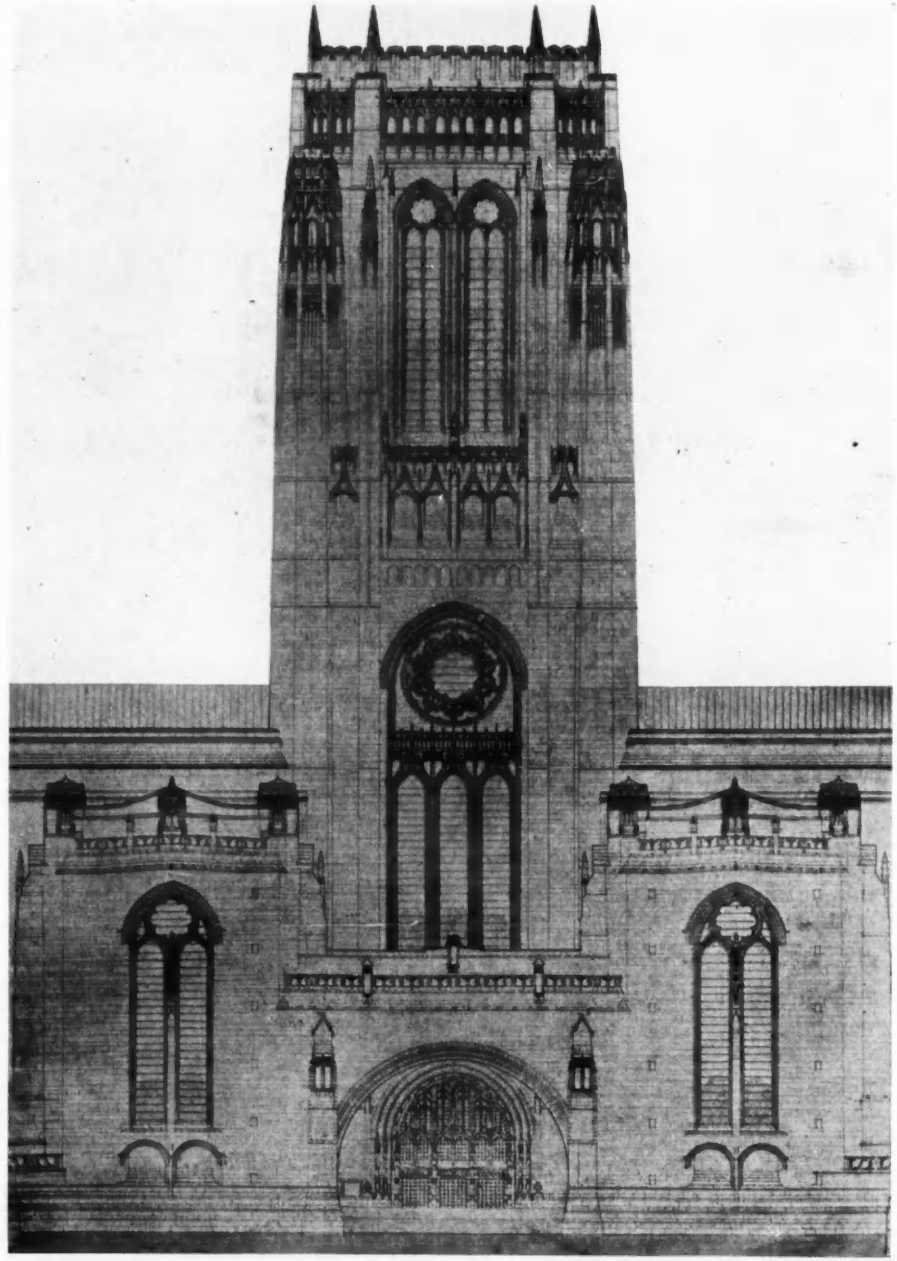
THE SKETCH CLUB: SECOND SESSION

UNDER the heading, "The Sketch Club to the Rescue!" the announcement was made in our last issue that it had been resolved to extend the hospitality of these pages, this week, to Royal Academy exhibitors.

The ban, or partial ban, on perspectives in the architectural room of the Academy does not seem to have been very effective, and indeed one scarcely notices any difference in this respect between the present exhibition and its predecessors. The actual veto only extended to the Royal Academicians themselves and to the Associates, and in the case of exhibitors of the rank and file permission was given to submit perspective, but they were "recommended" not to do so. As was to be expected, however, when the Hanging Committee had to come to a decision with regard to these elaborate perspectives, they had not the heart to reject them, or, perhaps, what is more likely, they did not think it politic to do so.

AT every Academy Exhibition those members of the public who have a sufficient interest in architecture to visit the diminutive apartment which is all that the Council of the Royal Academy can spare for the display of architectural designs, generally try to discover one particular exhibit which is more important or more striking than the remainder. In the present Exhibition few critics would dispute that first place should be given to the drawing which illustrates the tower of the new Liverpool Cathedral.

When we see this great structure rising from the ground, we cannot help feeling a sense of satisfaction that our own generation is capable of emulating the architectural achievements of the Middle Ages. Yet the conditions in the world of building in which Sir Giles Gilbert Scott finds himself are very different from those which prevailed in the period when a great cathedral took a hundred years or more to erect, and when the designing of its detail and ornament was the work of a large number of artist-craftsmen, each of whom, under the direction of a master builder or architect, was called upon to exercise his own originality. We may all congratulate Sir Giles Gilbert Scott upon fertility of invention in Gothic.



Liverpool Cathedral: elevation of Tower.
By Sir Giles Gilbert Scott, R.A.

In all probability the claim of Liverpool Cathedral upon the attention of architectural students resides principally in its qualities of mass and proportion. It will be remembered that in the original design with which Sir Giles won the competition many years ago, instead of the single central tower which we now see, there were twin towers which held the nave of the cathedral between them as in a vice. This design was certainly inferior to the one which afterwards took its place, for the two towers had no dominant to unify them and had little æsthetic relation to the nave. Unfortunately, however, the foundations of the building were laid before the alteration was decided upon; consequently, the central tower, which was placed in between the bases of the projected twin towers, had to fit into a space which was not originally designed for it. Sir Giles was able to amend his design with conspicuous success, and the silhouette of the cathedral must prove extraordinarily effective.

Perhaps the most remarkable feature in the plan is that the nave and choir are of equal length. This equality has been criticized on the ground that it is not justified in reason: as the high altar is at the end of the choir, it should itself be given a measure of formal emphasis.

But, however this may be, there is no question that the new Liverpool Cathedral makes us realize that Sir Giles Gilbert Scott is the originator of a new style for a great ecclesiastical building.

Royal Academy Exhibition, No. 1322.

SIR HERBERT BAKER was here

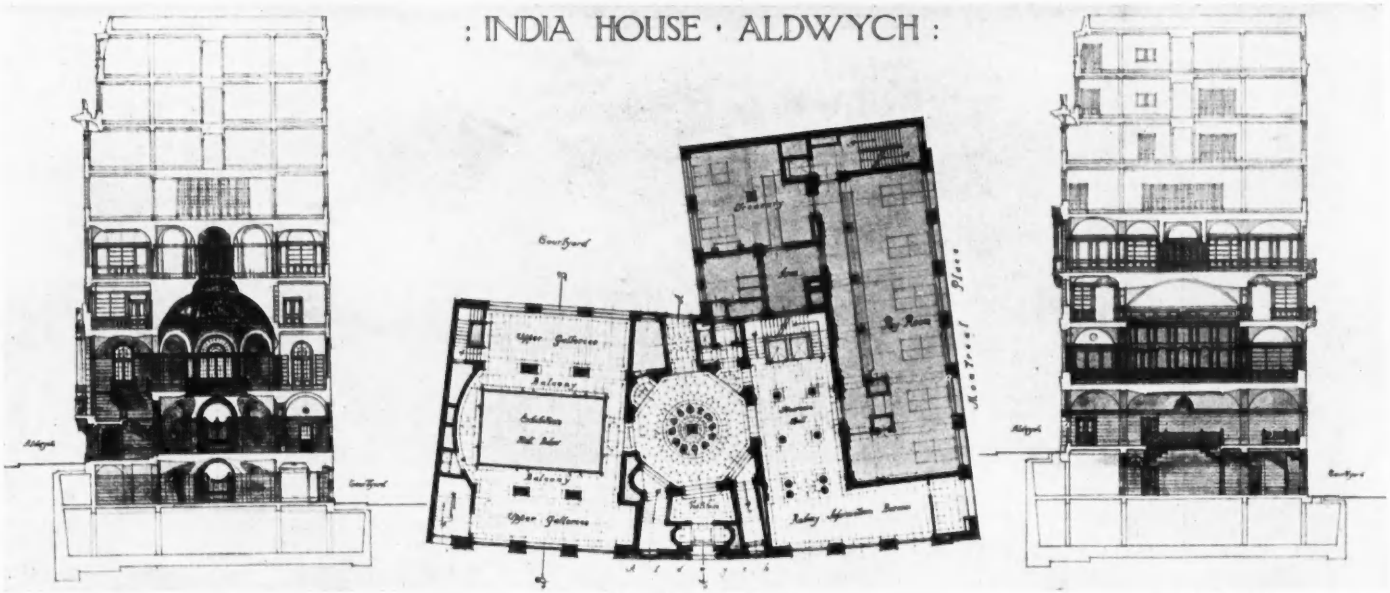
INDIA HOUSE · ALDWYCH ·

adjacent façade in Aldwych while the

By Sir Giles Gilbert Scott, R.A.

Royal Academy Exhibition, No. 1322.

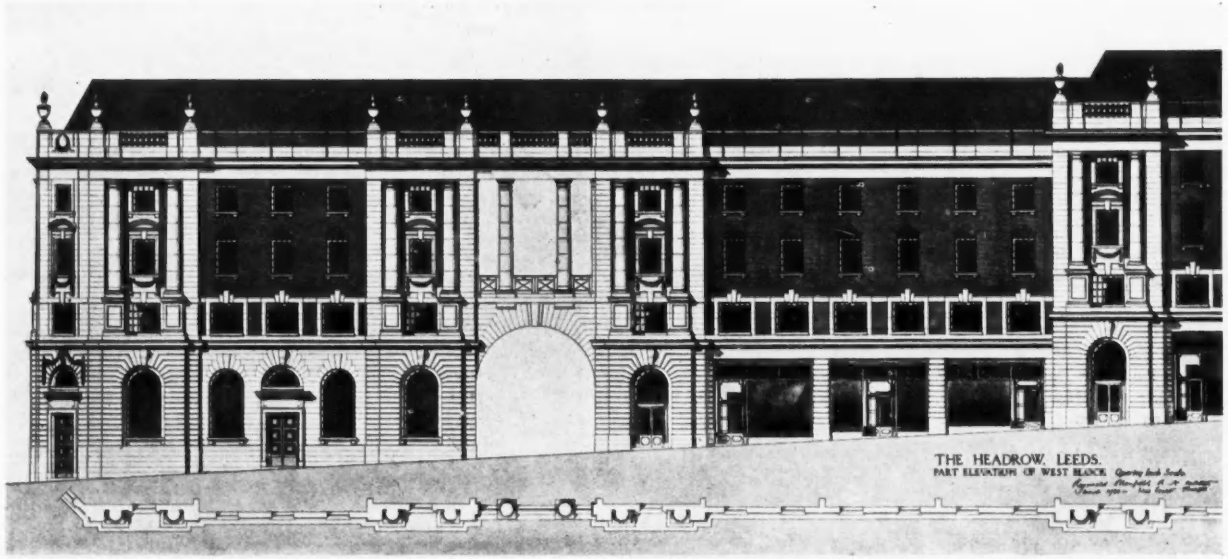
SIR HERBERT BAKER was here faced with the difficult problem of erecting, in a thoroughfare where the architectural tone of the locality had been already set, a great building which nevertheless was required to give some expression to a civilization alien to our own. The compromise which Sir Herbert has decided upon is a highly satisfactory one; on the outside of the building he has maintained in essentials the repetitive and rhythmical arrangement of windows which is to be found in the adjacent façade in Aldwych, while the only specifically Indian note is in the decoration. In the interior the most remarkable feature is the domed hall, which is completely buried in the building. This is the first time for such an experiment to be made, an experiment which would not have been possible before the creation of modern resources of artificial illumination. Within the hall is seen a lofty dome with lantern, which gives the impression of being lit by daylight.



India House, Aldwych.
By Sir Herbert Baker, A.R.A.

[*R.A. Exhibition, No. 1347.*

THERE is today a revival of interest in street building, which is occasionally expressed in architectural competitions for unified designs of street frontages. In other instances an eminent architect is commissioned to prepare a scheme for a whole street. Sir Reginald Blomfield has made an important contribution to the architecture of Leeds, in which the conventions of the Renaissance are successfully exploited in a façade which has certain points of resemblance to the new Regent Street Quadrant. The main problem in street compositions is the combination of order with variety, and for its solution our own English traditions offer sure guidance. The lines of the street must be supported by a dominant horizontality in the composition of the façades which abut upon it; on the other hand, it appears necessary to avoid monotony in the fenestration and sub-divisions. It is here that the Classic Order, used with discretion, is of very great help to the designer. In the Headrow, Leeds, the long ridge line of the roof helps to give coherence to the composition, while there is a delightful variety in the forms of the openings.



The Headrow, Leeds: part elevation of west block.
By Sir Reginald Blomfield, R.A.

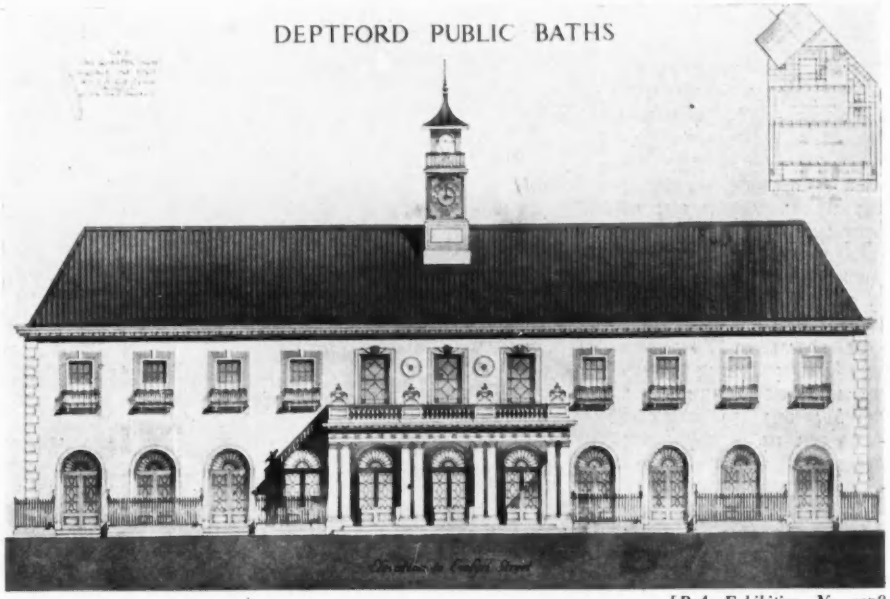
[*R.A. Exhibition, No. 1367.*



[R.A. Exhibition, No. 1371.

Houses at corner of North Street, Westminster.
By Oliver Hill.

IN these days of architectural iconoclasm it is pleasant to see a new building which accords so well with its eighteenth-century neighbours as does this one at the corner of North Street, Smith Square. The principal departure from the style of the Georgian period is in the roof, which is more steeply pitched and more prominent than that of the sedate urban buildings adjacent.

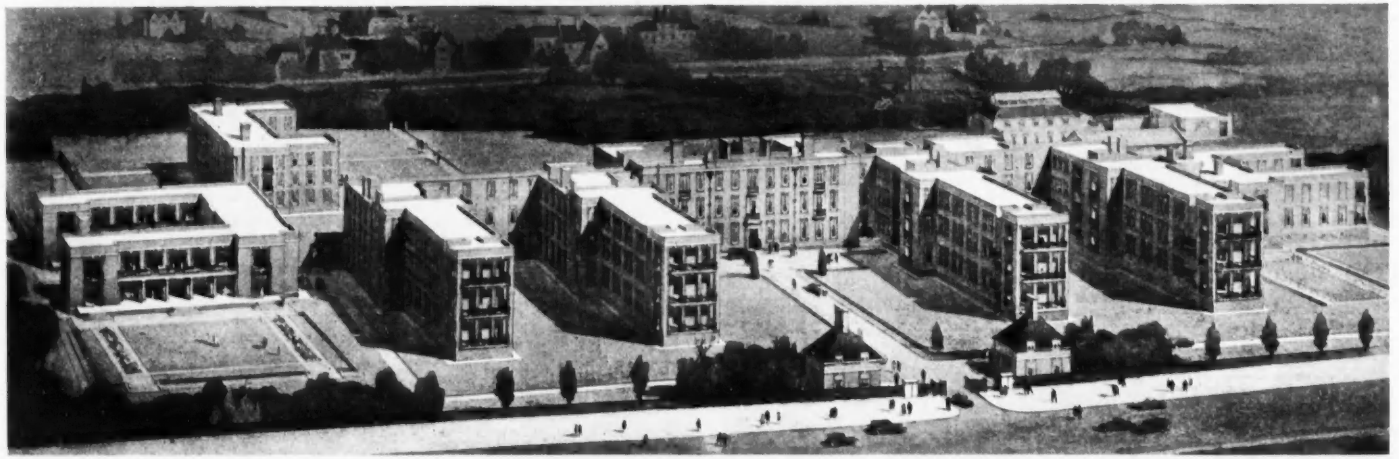


[R.A. Exhibition, No. 1378.

Deptford Public Baths: elevation to Evelyn Street.
By A. W. S. and K. M. B. Cross.

HERE is a building which, while serving a utilitarian purpose, is yet given a ceremonial character. Swimming baths are gradually assuming a greater importance in our social life and are deserving of the increased attention which they are now receiving at the hands of architects. This elegant façade, in the English tradition, should prove a welcome addition to the architecture of Deptford.

IN few departments of architecture has such an advance been made as in hospital design. Until recent years, there were erected a large number of hospitals conspicuous for the vulgarity of their appearance. Either their façades were broken up by a number of small subsidiary wings, displaying obtrusively the symbols of modern sanitation, or else—almost a worse defect—the buildings, to flatter the pride of donors, were ostentatious with their domes, turrets and other architectural emblems. In this great hospital a quite different and much more admirable convention is observed. In spite of the fact that the most complex requirements of planning are fulfilled, the new building has been given a simple form and ordered expression.



Southend General Hospital: bird's-eye view.
By Adams, Holden and Pearson.

[R.A. Exhibition, No. 1277.

BANKS have in recent years



ideas of stability and permanence.

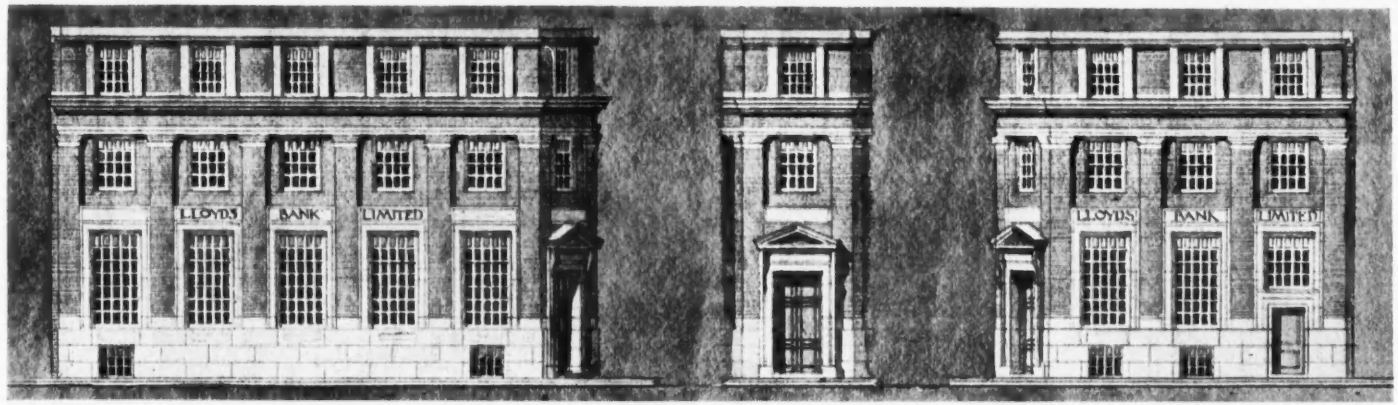
of modern sanitation, or else—almost a worse

Southend General Hospital : bird's-eye view.
By Adams, Holden and Pearson.

[*R.A. Exhibition, No. 1277.*

form and ordered expression.

BANKS have in recent years shown themselves to be most enlightened patrons of architecture. They have, however, exercised considerable caution, inasmuch as they have preferred a traditional Classic style. This policy is easily intelligible, for as a bank is by its very nature a conservative institution, so a bank building should express the ideas of stability and permanence. These elevations have a unity derived from the association of a well-articulated base, a central portion embraced by an Order and an attic properly subordinated to the whole, and it is difficult to imagine a period in which this type of façade will fail to give satisfaction to the beholder.

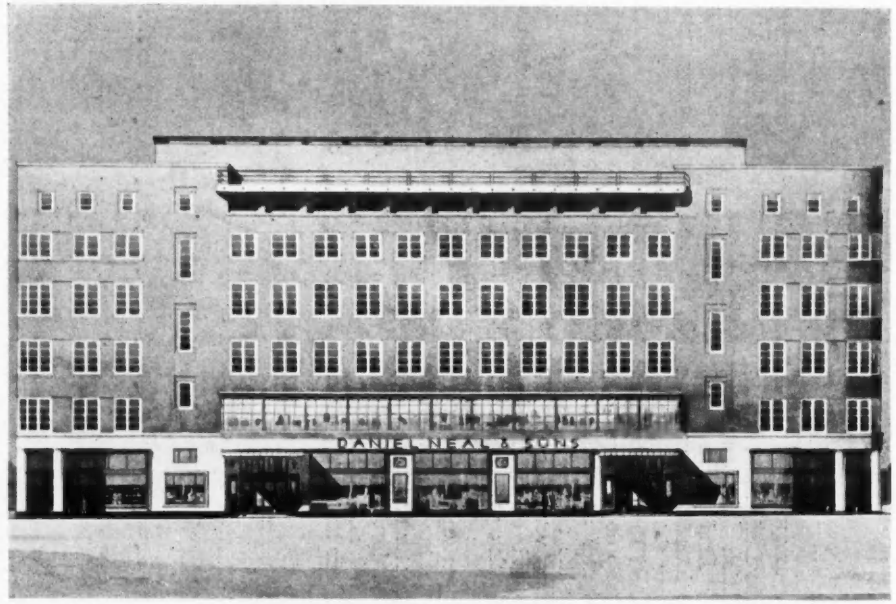


Lloyds Bank, Spitalfields. [*R.A. Exhibition, No. 1293.*
By W. Curtis Green, A.R.A., and Partners.



Artillery House, Westminster. [*R.A. Exhibition, No. 1405.*
By M. E. Webb and H. A. Dawson.

IN order to give to a tall office building, containing a hundred or more windows, a sufficient interest, architects are often tempted to belie the subject of the design by uniting the windows in artificial groups, suggesting that the building contains rooms of bigger dimensions than it actually does. Yet uniformity may lead to monotony or lack of it to tiresome diversity. In Artillery House vertical and horizontal emphasis is skilfully combined.



New Premises, Kensington High Street. [*R.A. Exhibition, No. 1354.*
By J. M. Easton and Howard Robertson.

THIS competitive design for a modern store, though apparently simple, is distinguished by a number of subtleties. To serve the ends of display of merchandise, the central first-floor portion has been incorporated into a shop front. The building has an adequate base, and upper terminal emphasis is given by a loggia, surmounted by an attic. The windows, of normal size, yet strike a modern note, for while bisected vertically by mullions, their panes are horizontal oblongs.

LITERATURE

THE FACE OF THE LAND

THE aim of the Design and Industries Association in compiling *The Face of the Land* has been to stimulate public interest in the most vital matter of our times—the beauty of our country and the seemliness of our civilization. To do so there could have been no better approach than that adopted by the authors: to let photographs speak very largely for themselves—the bad examples illustrating the civilization we seem to be heading for, and the good examples pointing to a better way.

Is it necessary that the new revolution resulting from motor transport and electricity should leave a trail of ugliness behind as it slowly but surely alters the face of our land? Have we learnt nothing from the mistakes of a generation which bequeathed us the Black Country, the slums and the Albert Memorial?

These and many other pertinent questions implied in the book must be answered by each individual member of the nation himself. The amenities of the countryside can only be preserved and improved by individual co-operation and by educating the large majority of the community who have been too long devoid of civic sense, too long uninterested in the design of everyday things, towards a greater love for seemliness and good order.

While certain legislation is called for, the Association ultimately and rightly pins its faith to education rather than to a multitude of bylaws. "We shall not make our country beautiful by legislation any more than we shall make it sober."

To those interests who are putting up a fight to retain the doomed roadside sign and hoarding, invoking the needs of British industry and the cause of the unemployed, the Association would say this: "Such cant would as well justify night-signs on Westminster Abbey itself, and as for business, it is a poor business sense that would spoil that countryside which draws hundreds of thousands of visitors from overseas." The book is dedicated to the memory of Sir Lawrence Weaver, sometime President of the Association, and its most steadfast friend.

The Face of the Land: the Year Book of the Design and Industries Association, 1929-1930. Edited by H. H. P. and N. L. C. With an Introduction by Clough Williams-Ellis, F.R.I.B.A. London: George Allen and Unwin, Ltd. Price 7s. 6d. net.



[*Photo: M. O. Dell.*



From The Face of the Land.] [*Edited by H. H. P. and N. L. C.*

"When we come to scenery such as that of the South Downs or Lakes, we are entitled to ask whether it is not grotesque folly to mar such national heritages for the sake of uniformity."

DIRECT BUILDING

THE RT. HON. JOHN WHEATLEY, in an introduction to this book, states that it is intended as a reply to a "furious national campaign" conducted against Direct Labour, and the constant reiteration of the old grievances against the "capitalist" mars what is otherwise an interesting study. The case for municipal building as opposed to private contracts is set out with an imposing array of statistics. But statistics can prove anything, and one feels that the supporters of private enterprise could produce an equally convincing set of figures.

The argument for direct building is built up on the assumption that the workman is a perfect human being; but those who have had to do with such schemes know that the workman is the one incalculable unit—he may be incompetent, or ca' canny, or he has been known to go off and work for a contractor where the chances of employment seemed more lucrative. Neither the employment of non-union men nor the restriction of output imposed by the trade unions are mentioned; perhaps these factors, rather than the hostility of Capitalists to Labour, are the real cause of the shortage of working-class homes.

LL. E. W.

Direct Building. Labour Research Department, 1929. Price 3s.

Publications Received

Architecture and Its Place in a General Education. By Sir Banister Fletcher, P.R.I.B.A. B. T. Batsford. 1s. net.

Roofing Tables. New Edition. By W. T. Harris. B. T. Batsford. 2s. 6d. net.

The Magazine of Today. No. 1. 1s. 0d.

SOCIETIES AND INSTITUTIONS

THE R.I.B.A. ANNUAL DINNER

The R.I.B.A. annual dinner, which is to be held in the Guildhall, E.C., on Thursday, May 15, will give those present an opportunity of seeing the Art Gallery, the Library and the Council Chamber at the Guildhall, as these will all be open to the guests.

The price of tickets for the dinner is £1 15s. each (inclusive of wines, etc.).

For those members who are unable to attend the dinner, but who may wish to have an opportunity of hearing the speeches, a limited number of seats will be reserved in the gallery of the Guildhall. Members who take advantage of this facility will also be able to visit the Art Gallery, Library and Council Chamber at the conclusion of the dinner. Applications for tickets should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1.



A reproduction of the dust cover of The Face of the Land, *a review of which appears on the facing page.*

ARCHITECTS' DRAWINGS OF THE EARLY NINETEENTH CENTURY

An illustrated lecture on "Architects' Drawings of 1800–1851" was given recently by Professor A. E. Richardson, F.R.I.B.A., at the R.I.B.A. Sir Banister Fletcher, P.R.I.B.A., presided.

The perspective drawings on which Professor Richardson based his lecture are on exhibition in the R.I.B.A. Galleries.

During the course of his remarks, Professor Richardson said that the first half of the nineteenth century was one of the great periods of draughtsmanship in the history of architecture. There were greater periods, such as the sixteenth century in Italy, but few periods could show such purpose at a time so distinguished by Babylonian confusion as were the years 1800–50.

It was, he pointed out, a time of transition from aristocracy to democracy; the structure of society was changing, and these changes gave rise to engineering and building differences.

He said the coming of the railways found engineers and architects who were familiar with the work of Piranesi ready to modify Roman construction in the design of their bridges, viaducts and tunnels, and the picturesque aspect of such work was constantly before the directors of railway companies.

The time demanded that all styles should be investigated, and it saw the close of the Classic and the rebirth of the Gothic movements. Architects put themselves into competition with the best contemporary painters, and the excellence of English perspective drawing during these years was largely due to the schools of the Royal Academy. The period closed with the great exhibition of 1851, when the spirit of the eighteenth century was interred and the nation proceeded to make an exhibition of itself.

ANNUAL MEETING OF THE C.P.R.E.

The annual meeting of the Council for the Preservation of Rural England was held at the R.I.B.A. on Thursday last. The Earl of Crawford and Balcarres, the president, occupied the chair.

He said they hoped that in the course of time convenient sections of the whole countryside would each contain an honorary advisory panel of trained men, engaged in public life, to whom people could turn for technical advice on problems that were arising. He pointed out that the system of panels was receiving the official support of the Ministry of Health.

Mr. Clough Williams-Ellis, F.R.I.B.A., in seconding the adoption of the report, moved by Sir Henry Newbolt, said that in the past year they had done something for England, but they had not done enough. They wanted power to do, as well as to undo. That necessary power could only come to them through adequate recognition of their efforts by the Government and through a really comprehensive and far-reaching General Amenities Bill. If the law would only endorse ordinarily enlightened public opinion, the fight for rural England would certainly be won. Otherwise he foresaw defeat.

The following names were added to the executive committee: Major-General Sir Fabian Ware, Sir Arnold Wilson, and Messrs. Boies Penrose, Frank Pick, H. Peach and Kenneth Spence.

Additions to the constituent bodies were made as follows: The Oxford Preservation Trust, the Cambridge Preservation Society, the Pure Rivers Society, and the Design and Industries Association.

HAMPSHIRE ARCHITECTS' VISIT TO ENGINEERING WORKS

The president (Mr. J. Arthur Smith, F.R.I.B.A.) and members of the Hampshire and Isle of Wight Architectural Association, accompanied by friends to the number of about fifty, recently paid a visit to the Basingstoke motor engineering works of Messrs. John I. Thornycroft, Ltd., where an interesting and instructive day was spent. The party was met by Mr. Alban Scott, F.R.I.B.A., the designer of the works, who briefly described the general arrangement of the premises.

Later, the party broke up into small units, each being personally escorted through the various shops.

The Association were also entertained to lunch by the Company.

RESEARCH SCHOLARSHIPS IN TECHNOLOGY

The Governing Body of the Manchester Municipal College of Technology (University of Manchester) offers a limited number of research scholarships in technology, each of a value not exceeding £100. These will be tenable during the session 1930-31 in the College.

Forms of application and all information are obtainable from the Registrar of the College.

ANNOUNCEMENT

The Victoria and Albert Museum is now open from 10 a.m. to 6 p.m. on Mondays, Tuesdays, Wednesdays and Fridays; and from 10 a.m. to 10 p.m. on Thursdays, Saturdays and Bank Holidays. On Sundays the hours are 2.30 p.m. to 6 p.m.

COMPETITION CALENDAR

May 16.—Messrs. Ewart and Son, Ltd., in conjunction with the Association of Architects, Surveyors and Technical Assistants, invite designs for a lock-up hangar for an aeroplane. The competition is divided into two classes, for those over and under 25 years of age at midnight, May 15–16, 1930. Assessors: William H. Hamlyn, A.R.I.B.A., and Chas. McLachlan, A.R.I.B.A., with A. N. Cathcart as technical adviser with regard to roofing, ventilation and hot-water supply. Two prizes will be awarded in each class, namely, free places in the A.A.S.T.A. party to Madrid in September, including second-class rail and steamboat travel throughout and all hotel expenses, except personal expenses. Messrs. Ewart and Son, Ltd., reserve the right to publish or make use of any of the designs for which a prize is awarded, but do not reserve the right to build in accordance with any of them. Particulars of the competition, etc., are obtainable from A. Seymour Reeves, Secretary, A.A.S.T.A., 26 Buckingham Gate, S.W.1. Latest date for submission of designs: May 16, 1930.

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs: June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor: J. Ernest Franck, F.R.I.B.A. Premiums: £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor: H. V. Ashley, F.R.I.B.A. Premiums: £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs: July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall which is to be built on the site of the old town hall, at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

July 31.—The Dudley Education Authority invites architects having an office within a radius of fifteen miles of Dudley to submit competitive designs for a Council school to accommodate 320 children, to be erected on the Brewery Fields estate; also a school for 400 children on the Priory estate. Assessor: Herbert T. Buckland, F.R.I.B.A. Premiums: £150, £100, and £50. Applications for conditions of the competition, etc., should be made to J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley, by April 30. Deposit £1 1s. Latest date for submission of designs: July 31.

September 1.—The Bangor (Co. Down) Borough Council invites architects or town planners to submit designs in competition for laying out the sea front within the Borough. Assessor: Professor Patrick Abercrombie, F.R.I.B.A. Premiums: £150 and £50 for first and second places, respectively. Copies of the conditions and plans will be forwarded on application to J. Milliken, Town Clerk, Borough Council Offices, Bangor, Co. Down. Deposit £1 1s. Latest date for submission of designs: September 1.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

11870. Hazell, R. Builders' floor cramp. April 15.

12259. Maschinenfabrik Fellbach Ges. Building-elements. April 17.

SPECIFICATIONS PUBLISHED

327731. Kuhn, M. Arrangement for rapidly drying out new buildings.

327766. Ingram, A. Building-blocks.

327821. Clare, G. E. Construction of fireproof floors and ceilings.

327841. Hollis, C. B. Blocks for flooring, paving, or the like purposes.

THE BUILDINGS ILLUSTRATED

Following are the names of the general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Christ Church Parish Hall, Brondesbury (pages 710-713). General contractors, W. H. Gaze and Sons, Ltd. Sub-contractors: Crittall Manufacturing Co., Ltd., windows; Jas. Gray and Son, heating; Redpath, Brown & Co., Ltd., steelwork; Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., fireproof floors; Joseph F. Ebner, terrazzo and composition floors; Douglas Cramb, electric light installation.

House, in Calonne Road, Wimbledon (pages 734-735). General contractor, G. Potterton. Sub-contractors: Rosser and Russell, Ltd., central heating; Bratt Colbran & Co., stoves; Claygate Brickfields, grates; The Farringdon Works, sanitary fittings; Educational Supply Association, garage doors; H. H. Martyn & Co., Ltd., decorative plaster; United Water Softeners, Ltd., "Permutit" water-softening plant.

TRADE NOTES

A new factory has been opened in Cambridgeshire for the manufacture of cement asbestos flat and corrugated sheeting, slates and tiles, etc., by the Atlas Stone Co., Ltd., of General Buildings, Aldwych, W.C. 2, who have been in the concrete paving slab industry for thirty years.

*

To the Foreman on the Job is the title of an interesting and useful handbook just issued by the Trussed Concrete Steel Co., Ltd., reinforced concrete engineers. As stated on the cover, it contains "useful information for the better execution of reinforced concrete." It is in fact almost indispensable to those responsible for the supervision of this form of construction. The information and instructions given are based on the firm's own experts' experience of reinforced concrete construction, over a period of twenty-five years. Aggregates, proportions, tables of weights and measurements and information concerning every phase of construction from start to finish are given, and space is also provided for working memoranda. The Trussed Concrete Steel Co. invite applications for copies from those whose duties bring them into contact with the many questions covered by the scope of the handbook.

*

Messrs. T. W. Palmer & Co. have sent us a copy of their latest catalogue of railings, gates, hurdle and continuous bar fencing, tree guards, and strained wire fences and gates. Photographs are also given of various types of steelwork fabricated by the firm. Among them are the main entrance gates and railings made and erected at the St. Pancras Housing Scheme for the architects, Messrs. H. V. Ashley and Winton Newman, FF.R.I.B.A.; ornamental gates and railings in London, Thames Haven, Mortlake and Ireland; a foot bridge with a span of 66 ft. for the Heywood Borough Council, Lancashire; an extension to the football stand for the Wimbledon Football Club; and iron fire escape staircases at Stillington Street, Westminster, for the War Office, and at Mitcham. The constructional steelwork, designed, fabricated and erected by the firm for a huge garage on the South Coast, and for studios at Elstree, Herts, are also illustrated. Copies of the catalogue can be obtained from Messrs. T. W. Palmer & Co., Merton Abbey Ironworks, Church Road, Merton Abbey, S.W. 19.

*

Messrs. J. H. Sankey and Son, Ltd., have sent us a new booklet illustrating and describing Sankmar plastic paint, by means of which innumerable variegated textures can be achieved by very simple means. Sankmar is a fine white powder which is mixed with water to a plastic consistency and applied to any surface. After applying, it is textured and then allowed to dry overnight, after which a coat of Sankmar surfacer, or a good white semi-flat inside paint, is added. When this has dried, any paint of reputable manufacture, lacquer, or

graining colour can be added to give the colour effect. Stippling, dabbing, or swirling can be done with a brush or cloth, or the fingers or palm of the hand may be used.

*

During the past two months the contracts placed with Messrs. Smith, Major and Stevens, Ltd., for S.M.S. lifts included those of forty-four important firms and individuals in London, the provinces, and abroad. There were seventeen repeat orders, always one of the most convincing tributes to the engineering standards of any firm. These included lifts for: the Bank of England, second section; London and Central Markets Cold Storage Co., Ltd.; Austin Reed, Ltd.; Edinburgh University, Geology Department; and for hotels for Watney, Combe, Reid and Co., Ltd., and the London, Midland and Scottish Railway.

*

The second number of *Leyland Rubber Relay*, published by the publicity department of the Leyland and Birmingham Rubber Co., Ltd., has made its appearance. With this number starts a series of articles describing the manufacture of the firm's main productions. Moulded hose is the first. The first part of Mr. Harry Sharp's description of his journey to South Africa also appears this month, and in the next issue it will be concluded, whilst Mr. Anderson's journey to Chile will commence. These articles promise to be exceptionally interesting. The journal, which is published at present every two months, gives much interesting and entertaining information as to the activities of the company.

*

In the shadow of the old Norman keep at Castle Hedingham there is an industry which still fosters the old pride of craftsmanship. It is that of Rippers, Ltd., whose woodwork adorns churches and great buildings throughout the land. Illustrations of much of this work and of buildings in which the firm have carried out the whole, or the major part, of the joinery involved appear in a brochure entitled *Ripper Woodwork*. Among the architects for the buildings shown are Sir John Burnet and Partners; Messrs. Joseph; Keynes Purchase; George Vernon; Wallis, Gilbert and Partners; M. E. and O. H. Collins; Wykeham Chancellor, and Alfred Cox; and among the illustrations are such important buildings as Adelaide House, London; Pensions Office, Acton; Melbury Court, Kensington, and Cox's Bank, S.W. There are also air-views of the firm's works and photographs of the mills, setting-out department, joinery, and other workshops. The actual manufacturing area covers 240,000 ft., and in addition there are over ten acres of sheds and stock grounds for raw material. Much attention is paid to the welfare of employees. Two housing schemes have been developed, one of fifty houses and thirteen bungalows, and a second of a further fifty houses. All these houses have large gardens.

THE ARCHITECTS' DIARY

WEDNESDAY, MAY 7

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Architects' Drawings of 1800–1850. 10 a.m. till 8 p.m. Saturdays 10 a.m. till 5 p.m. Exhibition closes on May 24. **10 a.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Exhibition of Wall Papers. 10 a.m. till 10 p.m. Until May 17. **10 a.m.**

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition open to the public. **10 a.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "National Parks." By S. K. Ratcliffe. Sir Fabian Ware, K.C.V.O., K.B.E., will preside. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art, held in the North Court. Open until September 14. **10 a.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

THURSDAY, MAY 8

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. "Dante and Italian Art." By Professor Edmund G. Gardner, F.B.A. (Lantern Illustrations.) **5.30 p.m.**

INSTITUTION OF STRUCTURAL ENGINEERS, 10 Upper Belgrave Street, S.W.1. Ordinary and Annual General Meetings. **5.30 p.m.**

FRIDAY, MAY 9

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Annual General Meeting. "The Rotary Automatic Telephone System." By J. W. Moffatt and J. C. Emerson. **6.15 p.m.**

SATURDAY, MAY 10

Sunrise, 5.18 a.m. Sunset, 8.36 p.m.

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION, The Castle, Winchester. Annual General Meeting. Address by G. C. Laurence, F.R.I.B.A., R.W.A., Chairman of Allied Societies Conference. **6.15 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 12

R.I.B.A., 9 Conduit Street, W.1. Ninety-sixth Annual General Meeting. **8 p.m.**

WEDNESDAY, MAY 14

LONDON SOCIETY, Lancaster House. St. James's Street, S.W.1. Annual Dinner at the Hotel Victoria, Northumberland Avenue, W.C.2. The Earl of Crawford and Balcarres will preside. 7.30 for 7.45 p.m. (Tickets 12s. 6d. each.) **7.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art to be opened by the Archbishop of Canterbury.

LONDON UNIVERSITY Presentation Day. Albert Hall. **2.30 p.m.**

THURSDAY, MAY 15

R.I.B.A., 9 Conduit Street, W.1. Annual Dinner to be held at the Guildhall, E.C.

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Special visit to Tilbury Docks. Meet at Superintendent's Office at 3 p.m. Early application to the Secretary for tickets is advisable. **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual General Meeting, 6 p.m. Irish Centre (Dublin). At the Physical Laboratory, Trinity College, Dublin. Annual General Meeting, 7.45 p.m. Hampshire Sub-Centre. At Southampton, Summer Meeting. **6 p.m.**

FRIDAY, MAY 16

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Technical College, Dundee. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S. **7.30 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to Dr. Saleeby's House in Kilburn. Assemble in Booking Hall, Kilburn Park Station (on Bakerloo Tube), at 2.40 p.m. **2.40 p.m.**

SATURDAY, MAY 17

Sunrise, 5.6 a.m. Sunset, 8.47 p.m.

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the Fishmongers' Hall, London Bridge, E.C. **2.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Second visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 19

ARCHITECTURAL ASSOCIATION, 36 Bedford Square W.C.1. General Meeting. "Architecture of Our Own Times." By Eric Mendelsohn. (Lantern Illustrations.) Exhibition of Architecture of Bloomsbury; also work of Eric Mendelsohn. Until June 14.

WEDNESDAY, MAY 21

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

THURSDAY, MAY 22

ARCHITECTURE CLUB. Dinner to Eric Mendelsohn. Particulars will be announced at a later date.

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the First Clubland Church, 54 Camberwell Road, S.E.5. **3 p.m.**

SATURDAY, MAY 24

Sunrise, 4.57 a.m. Sunset, 8.57 p.m.

MONDAY, MAY 26

R.I.B.A., 9 Conduit Street, W.1. General Meeting. "Recent Excavations at Ur." By C. Leonard Woolley, M.A., HON.A.R.I.B.A. **8 p.m.**

WEDNESDAY, MAY 28

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Father of English Pottery—Josiah Wedgwood, F.R.S., Potter, Inventor and Man of Science." By Harry Barnard. Frank H. Wedgwood will preside. **8 p.m.**

SATURDAY, MAY 31

Sunrise, 4.50 a.m. Sunset 9.5 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. In connection with the Bicentenary of Josiah Wedgwood, a special exhibition of Wedgwood ware will be opened in Room 136. **10 a.m.**

MONDAY, JUNE 2

INSTITUTION OF ELECTRICAL ENGINEERS. Summer Meeting at the Irish Centre. June 2–6, inclusive. Assemble in the evening at the Gresham Hotel, Dublin.

TUESDAY, JUNE 3

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. Annual Meeting. **7 p.m.**

GARDEN CITIES AND TOWN PLANNING ASSOCIATION, 3 Gray's Inn Place, W.C.1. Whitsun Housing and Town Planning Tour. June 3–14 inclusive. Visit to Northern Capitals of Europe. Full particulars on application to the Secretary of the Association.

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Motor trip in Co. Wicklow, including inspection of overhead transmission lines. Lunch and tea at Glendalough.

WEDNESDAY, JUNE 4

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Proceed by special train to Limerick for visit to the Shannon Scheme.

THURSDAY, JUNE 5

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Visit the brewery of Messrs. A. Guinness, Sons & Co. Lunch by invitation of the Company. Afternoon: Leave Dublin by special train for Belfast. Evening: Reception by the Lord Mayor of Belfast, Rt. Hon. Sir William Coates, at the City Hall.

SATURDAY, JUNE 7

Sunrise, 4.45 a.m. Sunset, 9 12 p.m.

WHIT MONDAY, JUNE 9

THURSDAY, JUNE 12

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual Conversazione, to be held at the Natural History Museum, South Kensington, S.W.

SATURDAY, JUNE 14

Sunrise, 4.43 a.m. Sunset, 9.18 p.m.

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND. Gloucestershire Branch. At the Town Hall, Cheltenham. Conference under the chairmanship of Major-General Sir Fabian Ware, K.C.V.O., K.B.E. 11 a.m. Opening address by the Mayor of Cheltenham, followed by "Regional and Town Planning." By Captain J. H. Trye, C.B.E., R.N, Discussion on the subject to be opened by G. L. Pepler. 12.45 p.m.: Lunch. Afternoon Session, 2 p.m.–4 p.m.: "The Traditional Building of the Cotswold and surrounding Stone Districts." By H. Stratton Davis, F.R.I.B.A.; and "Modern Building and the Use of New Materials," by Thomas Falconer, F.R.I.B.A., followed by discussions to be opened by Sir Philip Stott, Bart., and J. W. Robertson Scott, respectively. **11 a.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Annual General Meeting and Annual Dinner. Particulars will be announced later.

MONDAY, JUNE 16

R.I.B.A., 9 Conduit Street, W.1. Election of Council and Standing Committees: Election of Members. **8 p.m.**

WEDNESDAY, JUNE 18

R.I.B.A., 9 Conduit Street, W.1. British Architects' Conference, to be held at Norwich. Until June 21 inclusive.

FRIDAY, JUNE 20

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. At the Royal Society of Arts, John Street, Adelphi, W.C.2. Provisional date for a lecture on "Beautification of our Arterial Roads." By Thomas C. Adams.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Croydon Education Committee has prepared a revised scheme for the erection of an open-air school at ADDINGTON, at a cost of £7,000.

Messrs. Glyn, Mills & Co. are to rebuild their bank at 68 Lombard Street, CITY, E.C.

Plans passed by the COULSDON U.D.C.: Thirteen houses, The Horseshoe, off Smitham Down Road, for Messrs. D. M. Thomas and Son; two houses, Bradmore Way, for Mr. A. Potter; two houses, Hartley Old Road, for Mr W. W. Knights; nine houses, Marlpit Lane, for Mr. E. W. Booth; eight houses, Mossiea Road, Hilltop Road and New Barn Lane, for Messrs. E. O'Sullivan, Ltd.; nine houses, Westleigh Avenue and Rickman Hill, for Mr. H. Hemmings; two shops, junction of Rickman Hill and Chipstead Valley Road, for Mr. H. Bowgen.

The CROYDON Corporation is to prepare a scheme for the adaptation of the mansion at Coombe Cliff into a convalescent home.

Messrs. Chart, Son and Reading are to erect ninety houses at Ash Road, Oak Avenue, and Oak Gardens, CROYDON.

The Cattle Markets Committee of the City of London Corporation recommends the sale to the Southern Railway Company, for the sum of £3,000, of land and houses at DEPTFORD, acquired for the purposes of the Foreign Cattle Market Railway.

A church hall is being built at St. Michael's Church, GOLDERS GREEN, the cost of which will be £4,300.

Plans passed by the ILFORD Corporation: Twenty-two houses, Shenstone Gardens, Eastern Avenue, for Mr. J. Aldridge; twenty-four houses, Charter Avenue, for Mr. J. W. Lohden; three houses, Bruce Villas, Ashurst Drive, for Mr. G. F. Siegerts; additions, Golf Club House, Wanstead Park Road, for Mr. R. C. Arnold; twenty houses, Meadway, for Mr. J. Aldridge; six houses, Brancaster Road, for Mr. C. Fryatt; six houses, Vaughan Gardens, for Mr. T. Anders; fifteen houses, Campbell Avenue, for Mr. H. W. Christophers; factory, Wangye Works, High Road, for Mr. A. G. Luton; seventy-two houses, Clinton Avenue, for Mr. A. J. Jennings; depot and works, High Road, for Messrs. J. H. Sankey and Son, Ltd.; roads and sewers, Aldborough Estate, for Mr. G. F. Siegerts; four houses, Danehurst Gardens, for Mr. T. J. S. Blake; shop, Station Approach, for Mr. W. D. Key; fourteen shops and dwellings, Grays Corner, Eastern Avenue, for Mr. J. Aldridge.

Mr. C. Leslie Saul is negotiating for land in Gunnersbury Road, KEW, for the proposed new church.

The Essex Education Committee has authorized an expenditure of £17,000 for the enlargement of the LEYTONSTONE High School for Girls.

The Essex Education Committee has approved an estimate of £10,000 for the provision of new accommodation for the LEYTONSTONE technical school.

Plans passed at PURLEY: House, Woodcote Park Avenue, for Messrs. Morgan, Baines and Clark; two houses, Old Lodge Lane, for Mr. A. Close; house, Copse Hill, for Mr. J. G. Cooper; house, Hartley Down, for Mr. G. T. Fox; house, Oakwood Avenue, for Mr. W. J. B. Hunt; six houses, Old Lodge Lane, for Old Lodge Estates, Ltd.; working men's club, Whytecliffe Road, for Mr. B. R. Davies.

Plans passed at SANDERSTEAD: Two houses, Sanderstead Court Avenue, for Mr. D. A. Bowerman; two houses, Sanderstead Road, for Mr. H. P. Hawkes; house, The Ridgeway, for Mr. O. W. B. Ellis; house, Purley Downs Road, for Mrs. Hughes; nine houses, Purley Bury Avenue, for Mr. F. W. Thomas.

Messrs. Wates, Ltd., are to construct a road on the estate they are developing at STREATHAM, between High Road and Bishops Park Road.

The new super cinema at TOOTING, London, S.W., which is to be erected for Bernstein Theatres, Ltd., will have accommodation for 4,000 patrons. Plans have been prepared by Mr. Cecil Masey, A.R.I.B.A.

The Essex Education Committee has voted an estimate of £7,000 for the enlargement of the WALTHAMSTOW technical school.

The WIMBLEDON Corporation Estates Committee has asked the borough surveyor to obtain quotations for the demolition and clearing of the Farm Cottage site.

Mr. A. Victor Farrier, A.R.I.B.A., has been appointed to prepare plans for the reconstruction of the Queen's Cinema, WIMBLEDON, which was gutted by fire a few weeks ago.

EASTERN COUNTIES

The Essex Education Committee has voted £28,500 for extensions at the CHELMSFORD Art School.

The Essex Education Committee has voted an estimate of £5,000 for the provision of a laboratory at the County High School for Girls at CHELMSFORD.

Plans passed by the CHELMSFORD Corporation: Pump and engine house, Seymour Street, for Shell-Mex, Ltd.; new school of Science and Art, Market Road, for the Essex County Council; streets, sewers and surface water drains, the Rectory Farm, Springfield, for Messrs. French and Collins; house, Hill Road, for Mr. R. Fleming; two houses, Galleywood Road, for Mr. W. S. Pudney; house, Lady Lane, for Mr. S. T. Claydon; house, Tower Avenue, for Mr. J. C. Pryke; extensions, Golf Club House, London Road, for the Chelmsford Gold Course Co.

The Essex C.C. is to reconstruct Bowyer Bridge, near DUNMOW.

The Essex Education Committee has voted an estimate of £7,000 for the enlargement of the MALDON Grammar School.

The Essex C.C. is to reconstruct Raven bridge, ROMFORD, at a cost of £6,000.

SOUTHERN COUNTIES

Messrs. Griffith, Smith, Wade and Riley are to develop the Heath Farm building estate, BRIGHTON.

The BRIGHTON Corporation has approved the layout of twelve acres of land at Rottingdean, for the erection of ninety houses, and has instructed the borough engineer to prepare plans and estimates for the erection of fifty houses.

The BRIGHTON Corporation has obtained sanction to borrow £52,250 for widening the Brighton-Newhaven road from Roedean to Saltdean, and constructing a new road from Roedean to Marine Parade.

The BRIGHTON Corporation has obtained sanction to a loan of £206,000, for the sea defence works between Black Rock and Rottingdean.

The BRIGHTON Education Committee has passed revised plans for the erection of an elementary school in Lewes Road, at a cost of £31,000.

Plans passed by the BRIGHTON Corporation: Two houses, Dyke Road, for Mr. E. B. Hayward; house, Dyke Road, for Mr. W. F. Gates; rebuilding Richmond Place, Richmond Street, for Kemp Town Brewery, Ltd.; house, South Coast road, Rottingdean, for Miss E. L. Neilson; house, Dyke Road Avenue, for Mr. L. Hess; shop, High Street, Rottingdean, for Mr. W. Hilder; three shops, Belvedere Street, for Palmeira Avenue Mansions Estate Co.; house, Peacock Lane, for Mr. H. C. Foot; gymnasium and drill hall, Haydon Lodge, East Drive, for Mrs. May Lloyd; additions, Winter Garden, 82-83 King's Road, for Mr. Henry Sado.

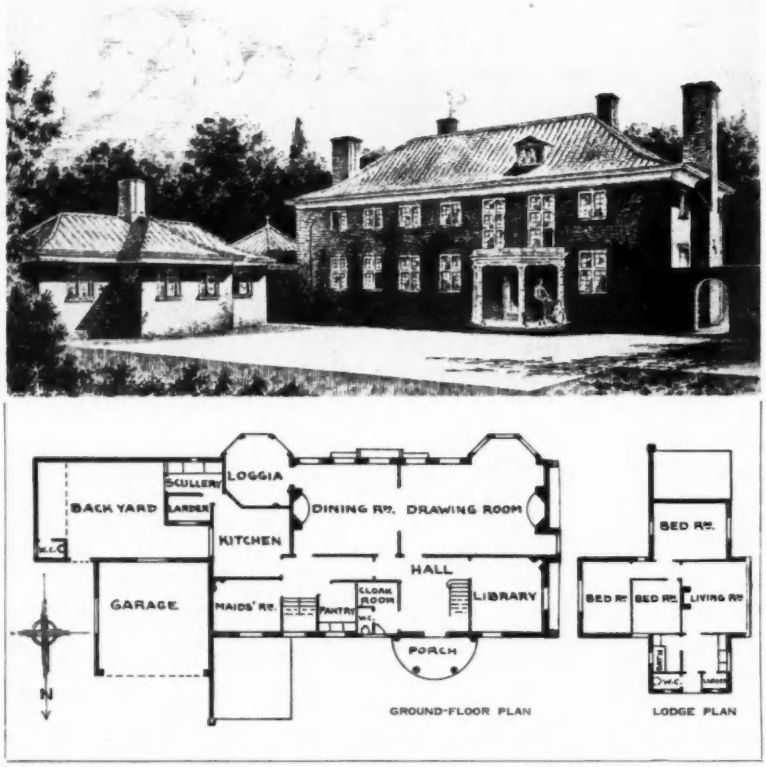
The ERITH U.D.C. has resolved to make application to the Ministry of Health for sanction to borrow £100,000 for the improvement of the sewerage system of the district.

Messrs. Annesley, Brownrigg and Hiscock have prepared a layout for the development of the Park estate, GUILDFORD.

The GUILDFORD Corporation Housing Committee has instructed the borough surveyor to proceed with the preparation of a scheme for the erection of approximately 250 houses on the Westborough estate.

The GUILDFORD Corporation Town Planning Committee is to consider the possibilities of the development of the Tuns Gate site.

Plans passed by the GUILDFORD Corporation: House, Stoughton Road, for Mr. S. Parsons; house, Ennismore Avenue, for Messrs. Stanley Ellis, Ltd.; house, Poltimore Road, for Mr. S. D. Pendry; R.M.O.S. quarters, Royal Surrey



House in Calonne Road, Wimbledon, S.W. Designed by James Ransome. A perspective view of the main front; and ground-floor plans of the house and lodge, the latter seen on the left of the perspective. The walls are of 2-inch grey bricks, with red brick dressings; and steel casement windows have been fitted. The roof is covered with tiles. The accommodation on the first floor comprises five bedrooms, three maids' rooms, two bathrooms and a dressing-room.

County Hospital, for the hospital authorities; alterations, "Bull's Head" public-house, 38 High Street, for Mr. Thomas Amey; four houses, Ardmore estate, for Mr. W. Hoptroff; alterations, Worplesdon Road, for Messrs. Pearks Dairies, Ltd.; four houses, Manor Road, for Mr. H. C. Watts; house, Boxgrove Avenue, for Mr. C. M. Sandall; store, Woodbridge Road, for Messrs. Pitcher & Co.

Plans passed by OXFORD Corporation: New road off New Road, Cowley, for Mr. A. J. Colbourne; stores, Collins Street, for Messrs. H. Tuckwell and Sons; two houses, Ferry Road, New Marston, for Mr. F. Weller.

SOUTH-WESTERN COUNTIES

The CHELTENHAM Education Committee is to seek sanction to borrow £1,590 and £5,986 for the cost of carrying out the alterations to Dunalley Street and Naunton Park schools respectively.

Plans passed by the CHELTENHAM Corporation: New church, Ewlyn Road, for the Emmanuel Church Council; sanitary block, Walton Court, Lansdown Road, for Mr. I. D. Yeaman; alterations, University House, Promenade, for Messrs. Fleming Reid & Co.; bungalow, Dowdeswell, for Mr. J. J. Broad; house, East End Road, Charlton Kings, for Mr. A. Isher; meter house, Cleeve Hill, for Cheltenham Gas Light and Coke Co.; seven houses, Brizen Pitch, Shurdington Road, for Mr. C. Giles; house, North Road, The Reddings, for Mr. R. C. Proctor; alterations and extensions, Salterley Grange Sanatorium, Leckhampton Hill, for Birmingham Corporation; bungalow, Daisybank Road, Charlton Kings, for Mr. S. Le Feuvre; house, Old Bath Road, Charlton Kings, for Mr. L. G. Thompson; two houses, Old Bath Road, for Mr. C. Dickens; electricity sub-station, Albion Street, for the Corporation.

The Plymouth Education Committee is obtaining a site in Penlee Street, DEVONPORT, for the erection of a special instruction school.

The PLYMOUTH Education Committee is obtaining land for the extension of the Montpelier elementary school.

The PLYMOUTH Corporation Electricity Committee has obtained a site at Pottery Road, for the purpose of a sub-station.

The PLYMOUTH Corporation has asked the city architect to prepare detailed plans of the proposed branch library at North Prospect.

The PLYMOUTH Corporation is considering the purchase of twenty-five acres of land at Efford, forty-eight acres of land at St. Budeaux, and six acres of land at Bull Point, for housing schemes.

The Swilley and North Prospect Tenants' Association is obtaining a site in Wolseley Road, PLYMOUTH, for the erection of a hall.

Plans passed by the PLYMOUTH Corporation: Store, rear of 29 Melville Terrace, St. Levan Road, for Mr. W. H. Middleton; two houses, Torr Lane, for Mr. J. O. Butler; sub-station, Anstis Street, for the Corporation Electricity Department; six houses, Raynham Road, for Messrs. W. R. Littleton and Son; six houses, Ganges Road, for Mr. R. Bate; four houses, Furneaux Road, for Mr. E. Edgcumbe; three shops, Eggbuckland Road, for Mr. J. W. Spencer; fourteen garages, Adelaide Place, for Mr. I. Fredman; bungalow, Woodside, for Mr. H. C. Foot; alterations and additions, 87 Union Street, for Mr. J. Brock; nineteen houses, Clinton Avenue, for Messrs. A. N. Coles and Sons, Ltd.; house, Salisbury Road, for Messrs. Coad Bros.; layout, Lipstone Estate, for Messrs. Prance and Prance; six houses, New Road, Swilly, for Mr. A. T. Collecott; two houses, Weston Park Road, for Mr. E. J. Morrish; two bungalows, Old Walls Estate, for Messrs. A. E. Searle and Son; nineteen garages, rear of Radford Road and Pier Street, for the Embankment Motor Co.; alterations, 1 Union Street, for Messrs. M. Burton, Ltd.

MIDLAND COUNTIES

The Watch Committee of the BIRMINGHAM Corporation has prepared a scheme for the erection of a new central police station and administrative offices, at a cost of £73,000.

The BIRMINGHAM Corporation has placed contracts for the erection of 4,171 houses on various estates.

The BIRMINGHAM Education Committee is to erect a Council school at Tedbury Crescent, Erdington, at a total estimated cost of £19,400.

The BIRMINGHAM Corporation is to erect six houses on the Allens Cross Farm Estate and four houses on the Bushmore Farm Estate, at a total estimated cost of £5,620.

The BIRMINGHAM Education Committee has acquired land at Warstock Lane, as a site for a public elementary school.

The BIRMINGHAM Education Committee is to erect a Council school at Kelby Close, Northfield, at a total cost of £50,300.

The BIRMINGHAM Corporation is to provide new stores and office accommodation at Selly Oak Hospital, at an estimated cost of £17,500.

Messrs. F. W. Woolworth, Ltd., are to erect new premises in Spiceal Street, BIRMINGHAM.

Mr. G. Linnecor is to erect twelve houses in Devonshire Street, Winson Green, BIRMINGHAM.

The Bourneville Village Trust is to erect eleven houses in Griffins Brook Lane, BOURNVILLE.

The COVENTRY Corporation has selected a site on the Pinlet estate for the erection of a new infectious diseases hospital. Provision is to be made in the first instance for a hospital of 150 beds. Competitive designs are to be invited.

The LEICESTER Education Committee is to enlarge the Syton Street school, at a cost of £4,000.

The LEICESTER Corporation is to prepare a scheme for widening Churchgate, from 38 ft. to 50 ft.

The LEICESTER Corporation is to extend the Gilross cemetery, at a cost of £5,800.

Plans passed by the NORTHAMPTON Corporation: House and shop, Birchfield Road, for Messrs. A. Glenn and Sons, Ltd.; two houses, Ardington Road, for Messrs. Stafford and Agutter; eight houses, Park Avenue, for Messrs. Walker and Perrett; two houses, Clarence Avenue, for Mr. H. Holloway; additions and alterations, The Rowans, Cliftonville, for the governors of St. Andrew's Hospital; alterations and additions, "Saracen's Head," Lawrence Street and Barrack Road, for Messrs. P. Phipps & Co.; two houses, Harlestone Road, for Messrs. W. S. Brown and Son.

The SMETHWICK Corporation is to erect, by direct labour, a further sixteen parlour type and four non-parlour type houses and twelve maisonnettes in Chapel Street.

Plans passed by the SMETHWICK Corporation: Seven shops, two offices and fourteen flats, Bearwood Street for the Ideal Benefit Society; house, Pitcairn Road, for Mr. Bayley; house, West Park Road, for Dr. Smout; extension of offices, Halfords Lane, for Messrs. Henry Hope and Sons, Ltd.; house, Lightwoods Hill, for Messrs. W. C. Stevens, Ltd.; show room and garages, St. Paul's Road and Galton Street, for Mr. W. J. Cooper; additions, 363–374 Bearwood Road, for Mr. H. Fawdry.

The SMETHWICK Education Committee has approved plans for the erection of a secondary school for 600 pupils on the Hall estate, at an estimated cost of £49,000.

The WILNCOTE (Warwickshire) Parish Council is to erect a parish hall, at a cost of about £3,000.

NORTHERN COUNTIES

The BURY Corporation has decided to erect twenty houses for sale on a site at Walmersley, on the outskirts of the borough. The cost will be £10,020. Approval has also been given to the purchase of land, at a cost of £3,262, at the Springs for the erection of houses. It has also decided to invite tenders for the erection of 100 flats at Woolfold.

The HULL Corporation recommends the acquisition of the Winstead Hall estate, for the provision of a mental institution for males.

The HULL Corporation Baths Committee has decided upon a site at the corner of Regent Street and Hessle Road, for the erection of public washhouses.

The HULL Corporation has obtained sanction for a loan of £6,000, for the erection of eight shops and houses on the Derringham estate.

The HULL Corporation is considering an alternative widening scheme for Waterloo Street, estimated to cost from £70,000 to £80,000.

In connection with the proposal of the HULL Corporation to purchase Queen's Dock from the London and North Eastern Railway, the Corporation Dock Committee has asked the city engineer to prepare plans for and estimates of the cost of the making of two new roads in the place of Whitefriargate bridge and the Old Dock bridge, and a scheme for a large underground garage to accommodate, say, 200 cars.

Plans passed by the HULL Corporation: Twelve houses, Pickering Road, for Mr. D. Smith; two houses, Silverdale Road, for Mr. P. Cheeseman; six shops, Inglemire Lane, for Mr. J. M. Bladon; compressor house, etc., National Avenue Works, for National Radiator Co.; two houses, Bricknell Avenue, for Mr. H. Sanderson; two houses and shops, Beverley High Road, for Mr. J. Taylor; two houses, Southfield Road, for Messrs. Camp and Sanderson; two houses, Riplingham Road, Kirk Ella, for Mr. F. C. Polley; billiards room, Waldegrave Avenue, for Mr. C. E. Ruston.

The HULL Education Committee is considering the provision of a school swimming bath.

The HULL Corporation has decided to erect twelve houses on the Derringham estate, to rehouse displaced slum dwellers.

The HULL Education Committee has appointed a sub-committee to consider the provision of nursery schools.

The MANCHESTER Corporation is to lay out grounds, etc., at the new sanatorium, Abergele, at a cost of £5,930.

Messrs. Harrison and Moore are to develop a building site in Lancaster Road, MORECAMBE.

The YORK Corporation has decided to reserve a site on the Burton Lane estate, for flats or small-type houses.

The YORK Corporation has asked the Building Sub-committee to consider whether the Council should apply for the sanction of the Ministry of Health to erect flats on the Hope Street site, instead of houses already approved.

Plans passed by the YORK Corporation: Additions, 58 and 60 Heworth Road, for Mr. E. Waudby; layout, Huntington Road, for Messrs. Culliford and Tindall; additions, East Parade, for Heworth Constitutional Club; revised plan, St. Helen's Square, for Barclays Bank, Ltd.; additions, Knavesmire, for York Race Committee; omnibus garage, Fulford Road, for the Corporation; alterations, Queen Inn, Lawrence Street, Black Swan Hotel, Peaseholm Green, and Black Bull Hotel, St. Sampson's Square, for the Tadcaster Tower Brewery Co., Ltd.; additions, Tang Hall Hotel, for Messrs. J. J. Hunt, Ltd.; four houses, Grange Garth, Fulford Road, for Messrs. R. J. Pulleyn and Sons; two houses, Chatsworth Terrace and Winchester Grove, for Messrs. W. E. Puckering & Co.; two houses, Cornborough Avenue and Tang Hall Lane, for Mr. J. Dowling; six houses, Muncaster House estate, for Mr. Denby Collins.

The YORK Housing Committee has recommended the York Corporation to accept a tender by Paul Rhodes, Ltd., to erect 124 houses on the Burton Stone Lane estate, at a cost of £46,748.

WALES

The ABERDARE Corporation has asked the borough engineer to prepare plans for extensions at the Fedw Her isolation hospital.

The MERTHYR Corporation is to prepare plans for extending the municipal bus garage.

Mr. W. Davies is to erect showrooms at the corner of Glebeland Road and Castle Street, MERTHYR.

The MERTHYR and SWANSEA Joint Hospital Board has prepared plans for the erection of a home for sixty-five nurses and an admission block at the mental institution. A chapel is also to be erected.

The PEMBROKE county engineer has prepared amended plans for the reconstruction of Hakyn bridge, at a cost of £33,000.

SCOTLAND

The following figures show the progress that has been made in State-aided housing schemes in Scotland to March 31, 1930: 1919 Act, by local authorities, 25,129; 1919 Act, by public utility societies, 421; private subsidy schemes, 1919 Additional Powers Act, 2,324; slum clearance schemes, 11,341; under construction, 2,133: 1923 Act, by local authorities, 4,030: 1923 Act, by private enterprise, 17,803; under construction, 1,426: 1923 Act, by public utility societies, 80: 1924 Act, by local authorities, 42,826; under construction, 5,468: 1924 Act, by private enterprise, 1,431; under construction, 1,512: 1924 Act, by public utility societies, 127; demonstration houses, 17; steel houses erected on behalf of the Government by Scottish National Housing Company, 2,552. Total, completed, 108,081. Total under construction, 10,539. Complete total, 118,620.

Messrs. Mactaggart and Mickel, Ltd., are to erect ten shops at Woodside Aikenhead, GLASGOW.

MISCELLANEOUS

The CAPE TOWN Corporation has approved a layout plan, prepared by the city engineer, of land on the Klipfontein Road, Mowbray, on which 470 houses can be erected. It is proposed to utilize the site for a housing scheme for non-Europeans. The Corporation desires, for the present, to proceed with a portion of the scheme which provides for the erection of 135 cottages.

The CAPE TOWN Corporation is preparing plans for the erection of a central fire station in Roeland Road, at an estimated cost of £40,000.

The CAPE TOWN Corporation has prepared a further housing scheme at a cost of £54,000.

The *Cape Times*, Ltd., has purchased from the CAPE TOWN Corporation the old fire station premises in Burh Street, for £40,000.

The Green and Sea Point Hebrew Congregation is to erect a synagogue on the Bordeaux estate, CAPE TOWN.

The DOUGLAS (I.O.M.) Corporation is considering a report of the Housing Committee's visit to Pulrose, with respect to the proposed additional houses and public hall.

The GOVAN District Board of Control has prepared a scheme for improving the heating at Hawkhear asylum, at a cost of £16,580.

The NEWPORT (I.O.W.) Corporation has appointed a committee to consider the provision of a bathing pool or public swimming baths.

THE PUBLISHER'S PAGE

THE page at the head of which these words are printed is by way of being something new in THE ARCHITECTS' JOURNAL. Hitherto the Editor has had his say week by week, and many hundred different contributors, from famous people like Karshish down to insignificant little fellows like [deleted by Editor], have told readers what they think. The only person who has not been admitted to the pages of the JOURNAL is the Publisher. And yet the Publisher of THE ARCHITECTS' JOURNAL is not an altogether negligible person, nor is THE ARCHITECTURAL PRESS a concern of no importance. It is important not, because it publishes THE ARCHITECTS' JOURNAL: dear me, no! But it publishes many other things besides, including the finest architectural monthly in the world and books that are found on every architect's shelf wherever English is spoken. In a word, the doings of THE ARCHITECTURAL PRESS are as varied as they are significant, and it is believed that the notes on their doings which are to appear here every week will be welcomed by very many readers and will be eagerly read.



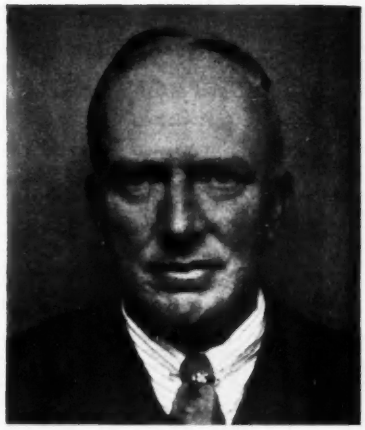
Mr. Maxwell Ayrton, in whose Hampstead studio a sketch club meets weekly.

A WORD was dropped about *The Architectural Review* just now. Are readers of the JOURNAL aware that the *Review* has made, this month of May 1930, one of the noblest efforts of its long and distinguished career? A double number on *English Decoration* has been produced which will remain the most authoritative publication on this subject for years to come. A great deal has been heard about the modern movement, and a great deal written, even in our own language; but those books and articles that have appeared in England make so little of the English contribution to modern decorative art that our country might be a provincial French town or an island in the Pacific for all the attention that is paid to its activities. No doubt there is a reason for this neglect, but whatever the reason it cannot excuse it. *The Architectural Review*, May issue, furnishes proof (if proof were needed) that English decorative art is not less but more alive than that of most Continental countries, and shows us (as indeed we do need to be shown) that our national habit of self-depreciation must be broken for once if this movement is to continue its growth and to earn its rightful place in the world's esteem.

THE Sketch Club hardly knows itself this week, so bustling is it with the invasion of guests from the Royal Academy. Members cannot be expected to feel quite at home with so many strangers about, but what is one to do? These little courtesies have become an established custom in the Club world, and next month the West End clubs will start on their annual cleaning work and the same sort of invasion will give a score of smoking-rooms a very unaccustomed air. Who knows? A day may come when the Sketch Club will be glad to accept a return offer of hospitality. Meanwhile we try to be as polite as our position of hosts requires we should be, and members will no doubt have some very pleasant things to say about the present fortnight's exhibits.

A number of Sketch Clubs precisely like ours are functioning up and down the country, and this week we print the portrait of Mr. Maxwell Ayrton, the presiding genius of such a club which has been flourishing at Hampstead for some time past. The Club assembles once a week at a studio which is lent to it by Mr. Ayrton. Members bring their work, which is hung up around the walls, and a pleasant evening is spent discussing members' sketches over a sandwich and a pipe of tobacco. The only difference between this Club and THE ARCHITECTS' JOURNAL Sketch Club is that Mr. Ayrton's fellow-members are set a subject to which they all work. There is, in other words, a regular programme for each meeting. This is a procedure which we may well ask leave to adopt ourselves one day. At the moment, however, our freedom is rather dear to us, and we shall be surprised if members are not found clinging to it a little longer. It will become especially valuable in connection with a new development, particulars of which have been promised for the next assembly of the Club on Wednesday, May 21.

ARCHITECTURAL literature is amply supplied with detail drawings and directions for the everyday things of architectural practice—the bread-and-butter stuff; but who can name a book of any importance to provide really *well-designed* examples of such things as door and window frames, eaves, staircases, simple brick details, or any of the thousand and one things which form the bulk of most architects' work? To combine practicality with



Mr. A. J. Penty, whose book, "The Elements of Domestic Design," has just been issued.

good design is the *raison d'etre* of Mr. Penty's new book, *The Elements of Domestic Design*, which has just come forth from THE ARCHITECTURAL PRESS. Some of the material in this book has already appeared in THE ARCHITECTS' JOURNAL, but the majority of the book is new. Any architect who read Mr. Penty's spirited defence of "cribbing" which appeared in the JOURNAL recently might perhaps think that this book is a "crib" book. In point of fact, however, Mr. Penty deals with the principles underlying the design of simple things in domestic work, and shows how the old traditional principles can be adapted to fit in with modern conditions. An appreciative reader writes us as follows: "I have been reading Penty's book, and am enthusiastic. It ought to be a universal reference book; it is the only book I know of that deals with constructive detail from the point of view of design, which is what architects have always wanted and never had. The book is also of enormous interest and delightful to read. It seems to me a memorable work and one that is bound to establish itself, if it has a good chance, at once. Penty is a great man." We would venture to say that this reader has seen the point of *The Elements of Domestic Design*.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_1	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A_2	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_2	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour ;* NAVVY, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day :

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5 ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* BRICKLAYER, 1s. 8½d. *per hour ;* PLUMBER, 1s. 8½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. 6 in., *per ft.*	0	1	3
DO. 9 in., *per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 in., *per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour ;* DO. *fixer,* 1s. 9½d. *per hour ;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone :			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube £0 2 2
DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER, 1s. 8½d. *per hour ;* TILER, 1s. 8½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200 :			
Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal :

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey			*Med. Green*		
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies. 12 in. to 8 in. long				4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour ;* JOINER, 1s. 8½d *per hour ;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds) :			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	0	8	6
PITCH PINE, add 33⅓ per cent.				
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6	
SARKING FELT laid, 1-ply, per yd.	0	1	6	
DO., 3-ply, per yd.	0	1	9	
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0	
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½	
DO. 9 in. wide and over per ft. sup.	0	1	2	

[*continued on page* xxxi

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
DO. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£3	0	9
Linseed oil, raw, per gall.	0	4	6
DO., *boiled, per gall.*	0	4	9
Turpentine, per gall.	0	4	7
Patent driers, per cwt.	1	10	6
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	2	2	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	6
DO., *flat, per gall.*	0	15	6
DO., *paper, per gall.*	1	2	6
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	5
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, 5/32 in., grey flat per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpoliahed, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	5½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

BUILDING CONTRACTS OPEN

Unless the contrary is expressly stated, all deposits required for bills of quantities, etc., are returned on receipt of bona-fide tenders. The words "Fair Wages Clause" inserted in certain paragraphs signify that persons tendering must conform to a fair wages clause in the contract, which requires them to pay the rates of wages current in the district. Application for plans and particulars should be made to the address given at the end of each entry.

BUILDING

EAST WEMYSS : HOUSES

May 8.—For the various trade works in connection with the erection of thirty-two three-room houses of the flatted type and sixteen two-room houses, and for the street works at East Wemyss, for the Kirkcaldy District Committee. G. B. Deas, Architect, Central Chambers, Kirkcaldy.

BEXHILL : TOWER

May 8.—For the erection of a drill and hose tower, 50 ft. high and 9 ft. square, in the Town Hall Yard, Bexhill, for the T.C. The tower will be a steel-framed building, timber covered. This contract will not include the provision and erection of the steelwork. W. Pearce, Borough Surveyor, Town Hall, Bexhill. Deposit £1 1s.

BARKING : SCHOOL

May 9.—For extensions to the Park Modern School, Barking, consisting of two manual training classrooms, two dressing rooms, two shower-bath rooms, lavatories, two cycle sheds and small wooden pavilion, for the E.C. C. J. Dawson, Architect, Clock House Chambers, Barking. Deposit £2 2s.

CATERHAM VALLEY : HOUSES

May 10.—For erection of thirty-six houses upon the Stafford Road site, adjoining Croydon Road, Caterham Valley, for the Caterham and Warlingham U.D.C. The Engineer and Surveyor to the Council. Deposit £3 3s.

NOTTINGHAM : CHAPEL

May 10.—For erection of a new chapel in Nuthall Road, Cinderhill, Nottingham, for the trustees of the Primitive Methodist Chapel. Booker and Shepherd, Architects, Albion Chambers, King Street, Nottingham. Deposit £2 2s.

ALTON : HOSPITAL BLOCK

May 10.—For the following, for the Alton Joint Hospital Committee: (1) Erection of a new hospital block (timber and corrugated iron) and covered-way, and alterations to existing buildings; (2) preparation of site and construction of foundations for same. G. H. Webb, Surveyor, Town Hall, Alton. Deposit £1 1s.

GREAT LEIGHS, ESSEX : BUNGALOWS

May 12.—For erection of four semi-detached bungalows at Great Leighs, for the Chelmsford R.D.C. J. Dewhirst, Engineer and Surveyor.

CROYDON : HOUSES

May 12.—For erection of sixty-eight houses (seventy lettings) at Mitcham Road estate, for the T.C. The Borough Engineer, Town Hall, Croydon. Deposit £5 5s.

LUMB-IN-ROSSENDALE, LANCS : HOUSES

May 12.—For the erection of twelve three-bedroom non-parlour-type houses at Burnley Road, Lumb-in-Rossendale, for the Rossendale T.C. The Borough Surveyor's Office, Town Hall, Rawtenstall. Deposit £2 2s.

SLEAFORD : HOUSES

May 12.—For erection of a block of four workmen's dwellings in Martin Fen, near the Dales Head Bridge, for the Sleaford R.D.C. E. H. Sills, Architect, Council Offices, Northgate, Sleaford.

SUNDERLAND : HOUSES

May 12.—For erection of ninety four-roomed houses at Ford estate, under the terms of the Housing (Financial Provisions) Act, 1924, for the Corporation. The Borough Engineer's Office, Town Hall. Deposit, £2 2s.

CHORLEY : HOUSES

May 12.—For the erection of ninety-two houses on the Springs Road site, for the Corporation. The scheme comprises blocks of two, three, four, six and eight houses. Tenders may be submitted for the complete scheme or a portion thereof. Contractors should tender for only such number of houses as they are prepared to undertake substantially to commence at once and complete in all respects ready for occupation before October 1. The Borough Surveyor. Deposit £2 2s.

PETERBOROUGH : HOUSES

May 13.—For the erection of forty-seven houses adjoining St. Paul's Road, for the Corporation. The City Engineer, Broadway, Peterborough. Deposit £2 2s.

MANCHESTER : SCHOOL

May 14.—For the several works required in the erection of the Mauldeth Road Municipal School, Withington, Manchester, for the E.C. The Education Offices, Deansgate, Manchester. Deposit £2 2s.

ORSETT, ESSEX : HOUSES

May 14.—For the erection of twenty-two houses in the parish of Orsett, together with the demolition of certain existing property, for the Orsett R.D.C. G. F. Andrassy, Engineer. Deposit £1 1s.

HELSTON, CORNWALL : SCHOOL

May 17.—For the erection of a proposed new Sunday School at Godolphin Cross, Helston. P. Smitham, Godolphin Cross.

LONDON COLNEY, HERTS : SCHOOL

May 23.—Erection and completion of an elementary school to accommodate 200 scholars at London Colney, nr. St. Albans, for the Hertfordshire C.C. The County Surveyor's Office, Hatfield. Deposit £3 3s.

ILFORD : HOUSES

May 24.—For erection of 146 houses, together with the necessary house drains, at the Fencepiece Road housing estate, Barkingside, for the T.C. L. E. J. Reynolds, Borough Engineer, Town Hall, Ilford. Deposit £5 5s.

TENDER

PROPOSED MATERNITY HOME, Grove Road, Balham, S.W.12, for the Wandsworth Borough Council. R. J. and J. S. Thomson, Architects, 49 Hill Road, Wimbledon, S.W.19. Following is a list of the tenders received:

F. D. Hidden & Co., Ltd. (accepted)	£29,332	0	0
A. and F. J. Leather, Ltd.	29,854	0	0
J. Crewdson	29,980	0	0
Ide and Son	30,105	0	0
Hammond and Barr, Ltd.	30,137	0	0
William Moss and Sons, Ltd.	30,500	0	0
The Unit Construction Co., Ltd.	30,519	10	0
Sabey and Son (Islington), Ltd.	30,983	0	0
F. Liley and Sons	31,058	0	0
J. and C. Bowyer, Ltd.	31,273	0	0
Corolite Construction, Ltd.	31,453	0	0
Wilson Lovatt and Sons, Ltd.	31,765	0	0
William Hammond, Ltd.	32,471	0	0
Perrys (Ealing), Ltd.	32,800	0	0
Lole & Co., Ltd.	32,905	0	0
H. Hann	33,419	0	0
Grace and Marsh, Ltd.	33,720	0	0
J. and R. Thompson (London), Ltd.	33,728	0	0
W. F. Goodchild	34,069	18	6
G. Brittain and Sons, Ltd.	34,972	0	0
W. J. Marston and Son	36,500	0	0
S. J. Evans	38,600	0	0

MEASURES BROS. 1911 LTD.

Section Sheets and Estimates on Application.



Telegrams: "Measures, Boroh, London."

STEEL JOISTS

Structural Steelwork — OF — Every Description.

Prompt Delivery from Stock at Lowest Market Prices.



Telephone No.: Hop 3985 (4 lines).

SOUTHWARK STREET, LONDON, S.E.



MAIN ENTRANCE, MESSRS. GOOCH'S PREMISES, BROMPTON ROAD, S.W.

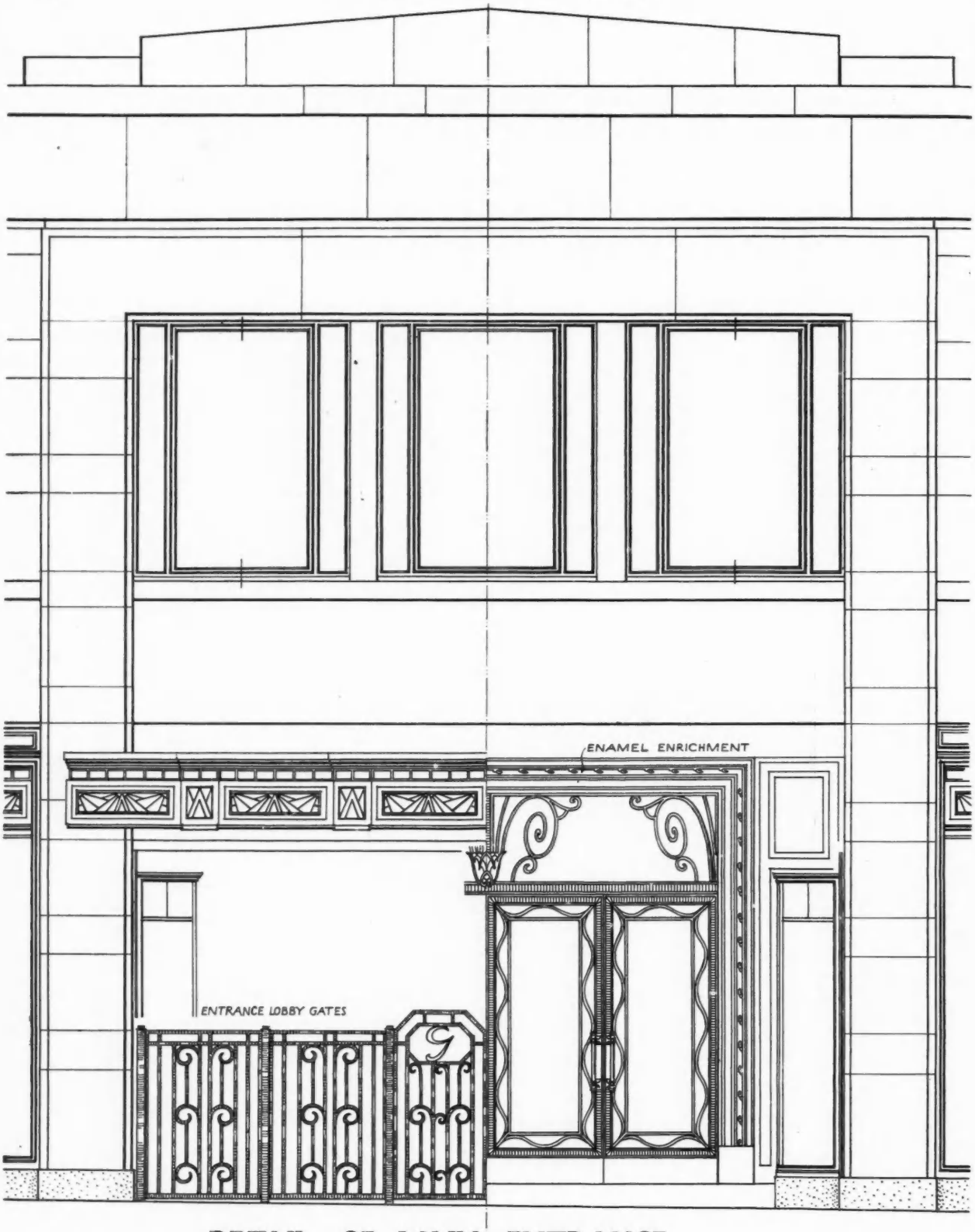
By G. ALAN FORTESCUE

THIS main entrance forms the centre feature of a new shop-front, faced in precast stone, and having stall risers and the bases of the piers and pilasters in Bon Accord granite of vertical section.

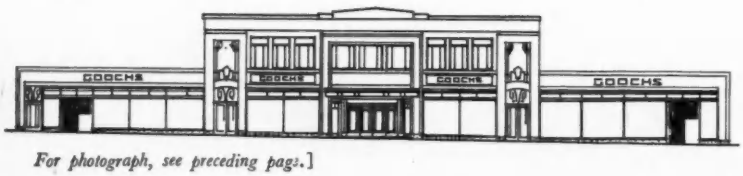
The entrance doors, frames and fanlights are of mahogany, faced on the street side with bronze having a special corrugated surface. On the inside the mahogany is French polished to a special neutral egg-shell finish. The exterior of the main entrance door-frame is finished with a two-colour enamelled border. In the centre lobby are splayed recesses, boxed out with an illuminated frieze and soffit. All the lobby floors are covered with Travertine marble.

The window enclosures have wrought-iron frames and grille work, with hinged opening doors, the whole of the metalwork being finished with sprayed gilding. The sashes are glazed with polished plate glass, secured with hardwood beads. The letters on the fascia are of cast bronze, with bronze margins and blue enamel filling.

Large- and small-scale drawings of this subject are reproduced on the following page.



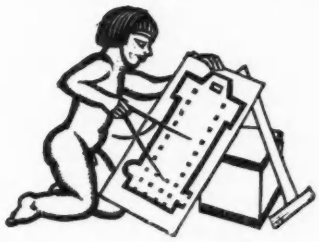
DETAIL OF MAIN ENTRANCE





For photograph, see preceding page.]

THE ARCHITECTS' JOURNAL



WEDNESDAY, MAY 14, 1930

THE MORAL OF CHARING CROSS

"What is now urgently needed is a town-planning authority for the whole of London."

NO one can have followed the sequence of events which have accompanied the controversies over Waterloo Bridge and Charing Cross Bridge without coming to the conclusion that all is not well with the architectural government of London. It seems, to say the least of it, peculiar that the London County Council, which is given so much executive power to make or mar the architectural development of the Metropolis, should consistently flout the authority of the learned bodies whose members have given serious and disinterested study to the major problems of civic design.

In no other country in Europe is the metropolis governed in such a provincial spirit. In fact, one might go farther and say that of all the big towns in England itself London has the most provincial-minded town council, and it appears that by the very nature of its constitution it must continue to have this unenviable distinction. The reason is that London is too big. Several of the metropolitan boroughs have a population equal to that of a great industrial city, but the inhabitants of Bermondsey, for instance, cannot bring themselves to have the same pride in Bermondsey as Liverpudlians have in Liverpool. Questions of rates and other local matters loom large in their eyes, and they find it difficult to envisage the relation which one metropolitan borough must bear to the next, or to the County of London as a whole. And, unlike the great provincial cities, these boroughs have no obvious and recognizable boundaries, and are without the æsthetic attribute of separate and distinct unity. Moreover, a person who lives in Bermondsey may find his daily employment in the city of London; a person who lives in Hampstead may find his employment in Westminster; and so his allegiance is apt to be divided. Yet we generally find that recruits to the London County Council are drawn from the ranks of those who have first had some experience in the local government of a metropolitan borough, and they start with the handicap of having served with a council which has never had to deal with the affairs of a township as a whole.

During the last few years the London County Council, each time with the most astonishing self-confidence, has tried more than one fall with the learned societies and has come off second best. The influence of the latter upon public opinion and upon Parliament itself was found to be sufficient to compel the L.C.C. in the first instance to postpone the fulfilment of its declared intention to demolish Waterloo Bridge, and in the second instance to abandon its singularly ill-considered layout for a new Charing Cross Bridge and its environs. And now, in a huff, the L.C.C. reverts once more to its original purpose with regard to Waterloo Bridge. Let its members, then, make this latter attempt if they will. It will only provide one more, and perhaps a final, argument which will prove the necessity of the London County Council being deprived of its present powers to determine matters of town planning and civic design, with which the majority of its members are not qualified to deal. What is now urgently needed is a town-planning authority for the whole of London, whose members will have authority to decide all the major questions of urban development in so far as these concern the co-ordination of traffic routes, the provision and preservation of open spaces, and the general control of street architecture in the Metropolis.

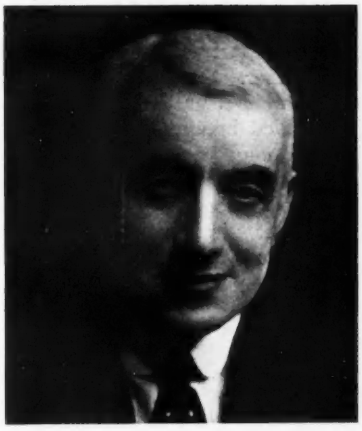
In such a body, the R.I.B.A., the Town Planning Institute, the London Society and the Royal Academy should be permanently represented, so that it should hereafter be impossible that there should be submitted for parliamentary approval a scheme so lacking in practical and artistic merit as that recently devised by the London County Council in collaboration with the Southern Railway Company and the Ministry of Transport. We do not attempt at this stage to offer detailed suggestions of the composition of such a body, for many questions would need to be considered before its executive powers could be defined and its personnel properly constituted. We believe, however, that matters have now reached an impasse, and that the present system of government in London has definitely failed to provide an adequate policy such as would enable the Metropolis to develop in accordance with accepted standards of civic design. We invite our readers to offer suggestions for the formation of such a new body which would serve the objects which we have outlined.



HEREFORD GARDENS: A MODERN STORE AND BLOCK OF FLATS.
BY MESSRS. JOSEPH.

This building, now nearing completion, has been planned as a store for Messrs. Gamages, Ltd., and a block of forty-four flats. The main front faces Oxford Street, W., and the flats occupy the zoned wings from the second floor upwards, facing Park Street (to the left of the illustration) and towards Park Lane. The store is to utilize the centre portion of the building above this level, and the whole of the basement, lower ground, ground and first floors. The store area alone is approximately 300,000 square feet. The building has been designed to comply with a preconceived style of the Grosvenor estate.

NEWS & TOPICS



Gerald McMichael, architect for most of Birmingham's municipal banks, and for the Great Barr Colony for Mental Defectives, illustrated in this issue.

THE DEMISE OF THE CHARING CROSS BRIDGE BILL

THERE is an old superstition that thirteen is an unlucky number. From the point of view of the London County Council it would seem to be true in the case of the Charing Cross Bridge Bill, for it was at the thirteenth meeting of the Private Bill Committee of the House of Commons, presided over by Sir Henry Cautley, that the grandiose scheme of the Council was definitely rejected. To those who have followed the sittings of the Committee the result will cause little surprise, for it has long been apparent that the members were not enamoured of the proposal to put the new Charing Cross Station at the bridge-head, and the dilemma of the Committee was in no way lessened by the stubborn attitude of the London County Council. Members of Parliament of all parties are now asking what the next step will be. In their present mood it seems unlikely that the Council will put forward a fresh Bill for a new Charing Cross Bridge: they are more likely now to concentrate on Waterloo Bridge. Lovers of Rennie's work of art should be prepared to withstand yet another onslaught.

THE ARCHITECT AS SERVANT?

A leading article is the proper place for the discussion of the Charing Cross Bridge developments, and I should not be led to add my opinion were it not that Mr. Frank Pick's letter to *The Times* of May 8 provokes me to a certain indignation, that he at this hour should be so mistaken as to imagine that architectural opinion has wished the Southern Railway station set back from the south bank *because a station is hard to make beautiful.* If that were the issue, architecture might well be bankrupt, and architects as childish and as little able to use their peculiar sense of fitness as he makes them out to be.

*

I quite agree with him that those architects who have given time and trouble to the solution of the problem have done so under all the restrictions that lack of data can bring, but I also see that too close a proximity with traffic experts and the greed of the Southern Railway may lead to results that fall still further below the best solution of the problem.

*

For the architect is not a servant of his master, but a superior agent, and at his best an artist. The men who worked out the official scheme were not artists, and had no thought above the problems, the facts, the circumstances, and the Southern Railway, with which they were surrounded. What profit they expected from the architect who did his best when their masters were served, none of us can know. It has not been very much, for nobody could accept a lovely station front when the back was a riot of ugliness and bad thinking.

ERIC MENDELSOHN, ENGLAND'S GUEST

Eric Mendelsohn, whom England is honouring next week, is the youngest of four or five German *Baumeister* who have done much to give expression to the individuality and significance of our century. With the single exception of Peter Behrens, he is the greatest architect whom Germany has produced. The dinner, on May 22, to him, therefore, is fraught with importance for the enfranchisement of the modern spirit in Great Britain. As so often before in our history, we have been won over in despite of ourselves by sheer power of imagination and quality of workmanship.

*

Eric Mendelsohn was born in 1887 at Allenstein, in East Prussia. He studied architecture and civil engineering in Munich and Berlin, where he now lives. His name first acquired international prominence with the observatory tower he built for Einstein at Potsdam in 1921. This revealed him as a man who had dared to forget all he knew about architecture, with an academic capital "A," in order to obtain the fullest scope from a new material like concrete in meeting the baffling, and, in a technical sense, anything but "relative" requirements of an observatory. That the "Einsteinturm" was (and still is) violently decried goes without saying. But it made the sort of people think, and think again, whom Le Corbusier's pile-foundation villas and rhetorical prose have left unmoved. Actually, Mendelsohn's first building in Berlin was the reconstruction of Messrs. Hausleben's premises in the Dorotheenstrasse, behind Unter den Linden, begun in 1919. Indeed, one of the many directions in which his influence has been most widely felt is in the "planing down" of exuberant nineteenth-century façades so as to leave bare, well-proportioned wall spaces and rational fenestration.

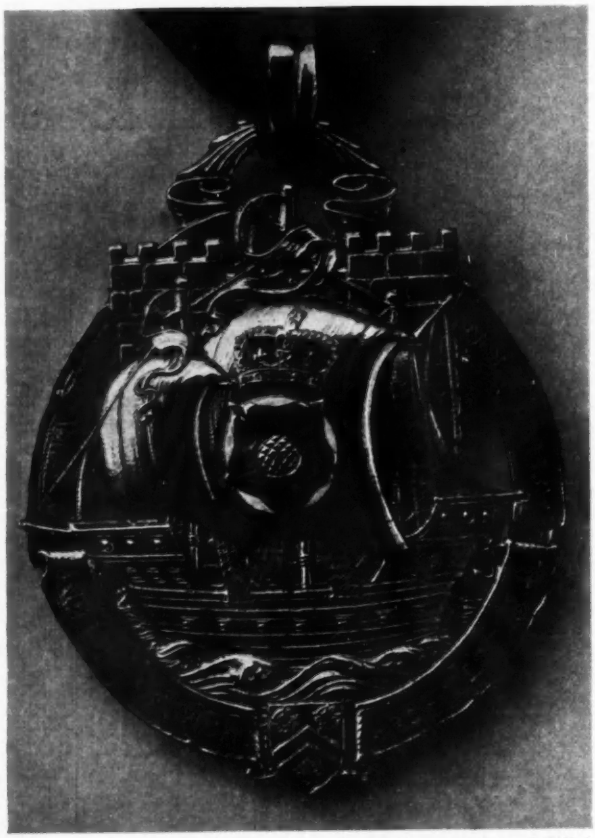
*

In 1928 came the remarkable and now universally famous "Universum" Cinema on the Kurfürstendamm, together with blocks of dwellings (notable for the continuous sweep of the rather Dutch-looking brick and concrete balconies which stress their horizontality) in the Lehniner Platz in rear of it. Mendelsohn has already planned a hotel to complete the transformation of this site. The interior of the "Universum" showed that Mendelsohn could build with light and shadow with the same audacity, resource and originality as with brick, concrete, steel and glass. It is one of the few masterpieces of modernism.

THE STATUS OF THE ARCHITECTURAL ASSISTANT

That the case of the architectural assistant presents difficulties has already been recognized in a practical manner by this JOURNAL, which is holding its pages open gratuitously to those seeking employment. The "Memorandum on the State of the Profession," recently issued by the R.I.B.A., provides evidence that an important change has gradually come over the ranks of architects. The

proportions of "assistants" and "draughtsmen" to private practising architects has increased very much during the last twenty-five years and is destined to increase still further. We seem to be now tending towards a state where architectural offices will get ever larger and the work be divided between fewer private practitioners, who will need to engage larger staffs. This result is partly due to the fact that in our modern towns the units of building seem to be constantly growing in size and a considerable staff is required to enable an architect to prepare the more extensive working drawings entailed.



The new Presidential badge of the Hampshire and Isle of Wight Architectural Association.

An architect working by himself, or perhaps engaging one or two assistants, has not the smallest chance of being commissioned to design the large type of office building now in vogue, for the directors of the companies which are destined to be housed therein naturally apply to some firm which provides evidence of a capacity to handle a big job. Moreover—and this is an important consideration—architectural students who are anxious to equip themselves in the best manner, and to become acquainted with the most modern building methods, often prefer to seek experience in the great offices where there is better scope for their talents. The R.I.B.A., ever seeking to take a realistic view of the circumstances in which its members work, is therefore giving particular attention to the conditions which govern the employment of the enormous number of "assistants" now on its rolls.

*

A Salaried Members' Committee has been formed which will endeavour to safeguard the interests of these "assistants" and "draughtsmen," many of whom are now obliged to accept ludicrously inadequate payment in offices of Government departments, or County and Municipal Authorities, and in the employment of commercial and industrial undertakings. The numbers in this latter category have greatly increased during recent years, and it is particularly desirable that every commercial firm which employs architects on its own staff should be made to realize their professional status. A difficulty experienced by this Committee is the lack of response of the architectural assistants themselves. In order to ascertain the approximate numbers of Associates of the R.I.B.A. who hold salaried appointments, a questionnaire was issued in which every member was asked to state in general terms the nature of his employment. Unfortunately, however, only a quite inadequate number of replies has been received.

*

We here encounter a psychological problem, to suggest a solution of which is, I must confess, quite beyond my capacity. Is this lack of response a sort of sensitiveness, which unkind critics might designate opprobriously as snobbery, or is it a relic of the old-fashioned feeling that an Englishman's home is his castle and that nobody is therefore entitled to inquire into his private affairs? I had thought that in this age of officialdom most people had long ago been obliged to abandon such an idea. But, whatever the reason for this lack of communicativeness on the part of architectural assistants, it may be hoped that some means will be found of persuading them to collaborate with the R.I.B.A. in a matter which so closely concerns their own interests.

HISTORY IN GOLD

One of the most interesting presidential badges of the allied societies is that made this year for the Hants and Isle of Wight Architectural Association, which held its annual meeting [reported on a later page] on Saturday last. It is in nine-carat gold and has been designed and executed by Mr. Omar Ramsden, of London. The coat of arms of Hampshire, picked out in enamel, occupies the central position on the badge. Hampshire, of course, was noted in mediæval days for shipbuilding: it is therefore appropriate that its coat of arms should be represented as being carried on the mainsail of an old wooden ship, sailing the seas of Southampton Water, Spithead and the Solent, for many such ships were built for England from the oak of the county's forests. The Isle of Wight is represented by Carisbrooke Castle, the home of Princess Beatrice, the Governor of the island. A ribbon bearing the title of the Association surrounds this device, and at the bottom is a shield bearing the arms of William of Wykeham, the earliest known architect in the area and the founder and builder of Winchester College, who may justly be regarded as the Father of the Association.

UNDERGROUND SLEEPING ROOMS

One would hardly expect in these days to find a need for legislation in order to prevent the building of underground rooms to be used for sleeping places. But such things do happen in places as little remote as Holborn, and the Borough has resolved to ask the Ministry of Health for legal powers, requiring architects and others proposing to build such rooms to deposit full plans and particulars with the Local Authority before doing so. There is at the moment no means either of preventing the construction of such rooms or of ensuring that they are really fitted for sleeping in.

ASTRAGAL

STYLE *v.* STYLE

From Which Side Should the R.I.B.A. Jury be Picked?

Why I think the Jury should respect the English tradition

BY A. TRYSTAN EDWARDS

THE majority of the R.I.B.A. Jury should have an understanding of the English tradition of urban architecture. Why should anyone seek to make such a stipulation as this? it may be asked. Because the English tradition of urban architecture is the best that there has ever been. Neither the Italians, nor the French, nor the Germans, nor the Swedes have either during the Renaissance period or up to modern times developed the same genius for street architecture as the English people showed at certain periods in the past.

I am not suggesting that a majority of the Jury should necessarily favour a building in the Georgian or Regency style, but that they should show either by their own executed works or written expressions of opinion that they have *an understanding* of these great achievements in urban architecture. For the new R.I.B.A. Building is going to be in the town and therefore it should express the qualities of urbanity. These are qualities of character and they have little to do with any question of style. For instance, in the city of Oxford we find mediæval buildings cheek by jowl with Classic ones, yet they harmonize wonderfully well because they were urban Gothic and urban Classic.

It is far more important to insist that the assessors should appreciate this point of view than that they should be definitely addicted to the Classic or any other style. Rather than that the new R.I.B.A. Building should be designed in the "country bumpkin" Classic of the school of Norman Shaw, it would be infinitely preferable for it to be Gothic, provided that it was urban Gothic with parapet walls and low roof in the late mediæval collegiate manner.

But better still would be a twentieth-century building which showed that its architect had mastered the lessons which are to be derived from the mature accomplishment of the Georgian period. The use of steel or reinforced concrete cannot render out of date those principles of architectural manners which are the expression of the civic aspect of building—the subordination of street façade to the design of street as a whole and the subordination of the street to the city as a whole.

If a "modernist" assessor of "cubist" persuasions helps to cut out the gables from the R.I.B.A. Building and saves it from the ravages of Garden Suburbia, he will be doing a good work. But, on the other hand, the "modernists" have hitherto distinguished themselves by a reckless individualism, so that the "modernist" buildings appear to express an even more poisonous hatred of each other than they have of the traditionalist work. Therefore I would urge that at the present stage in the development of the "modernist" movement its representatives should be in a minority in the Jury of Assessors for the new R.I.B.A. Building.

Why I think the Jury should be essentially modern

BY FREDERIC TOWNDROW

BEFORE, reader, I get your sanction to the kind of jury which I think we ought to have, I should of course explain the whole purpose and goodness of the modern movement; but the Editor has restricted me to 500 words; so I must assume that either you know all about its underlying philosophy, or that you are open-minded enough not to be frightened by the idea of a reasonable development in architecture. This being so, I had better describe the sort of building I hope we shall get for a headquarters, and, having first got your agreement upon this, it will be a simple matter to think about the kind of jury which would *suit the building*.

This is the sort of building I hope we shall get:

1. It would have to be well planned, but we should not regard the plan as the most important part of it, because it is the outside of the building which will be judged by the public.

2. The building should not be in any particular style, either old-fashioned or newfangled.

3. Any such building should be able to stand up to the future. Consequently, we must keep in mind the following points:

a: The younger a man is, the more he will use the building: the older he is, the less he will be able to use it; therefore this really belongs to young men and future generations.

b: So we must resist at all costs that typically British suggestion that because a building will be standing a hundred years hence, it must be designed in the style of a hundred years ago.

c: Consequently, it would not be wise to introduce such features as Classical or Gothic columns, cornices, friezes, swags, Roman shields, whatnots, lovers' knots or funereal pots; for strange to say, these things are going out of fashion, and though we older ones may find a certain sentimental pleasure or grace in them, future generations will only sneer, for they will always be able to see the sources from which we "cribbed" them.

4. To sum up. Our headquarters must be beautiful, as a creation by itself, without any of the superficial aids of the past or the present. It must be so pure and so simple as to offend no one—except the profligate or voluptuary—and so sincere that it does not matter whether we like it or not. To reach sincerity, its designer must stand firmly on his own feet in the twentieth century and work out every detail. He must take nothing for granted. He must have a reason for everything.

Now, to get such a building, what sort of jury will we require? It will be necessary to have men absolutely immune from the stylistic poison, whether the English or foreign poison or the ancient or modern.

BRANCH BANK: BEXLEY HEATH

DESIGNED BY DARCY BRADDELL AND HUMPHRY DEANE



A view of the façades to Woolwich Road (left) and Market Place. The four semicircular-headed windows on the left light the banking hall; that on the right lights the manager's room on the ground floor and the store room above.

THESE new premises are built on the site of an old branch of the bank. The elevations express the form of the greater part of the inside of the building, which is but a lofty hall. There was no wish to put any premises above the bank. The height of the small shops adjacent along the main street was kept to for the new façade. Externally, the walls are faced with a brindle-coloured hand-made brick, with cornice, stringcourses and other dressings in a dull red brick. The architraves to the windows are formed in specially-made tiles about 1 in. thick, moulded on plan and pointed with a weathered joint.

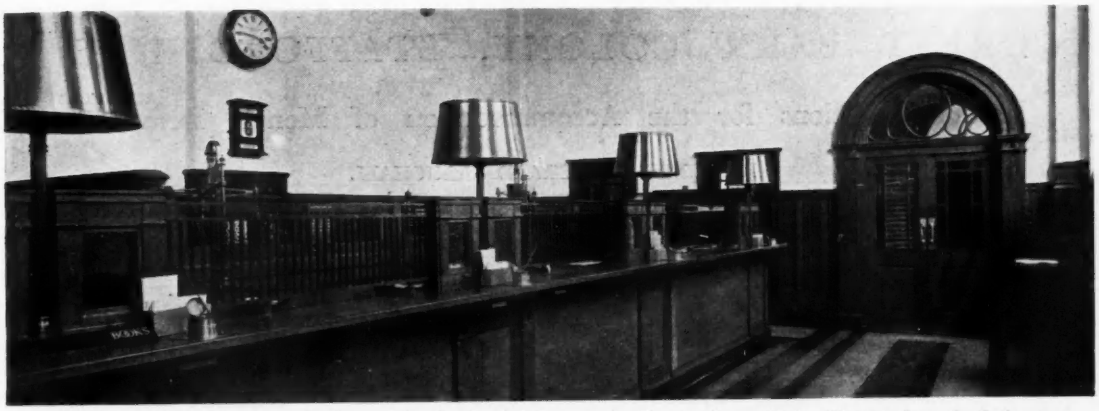
At the wish of the bank the entrance is planned on the corner, and is carried out in Portland stone, as is the plinth round the base. The gilt grasshopper which hangs over the doorway is the trading sign of Martin's Bank, and has been in use since its foundation in the sixteenth century.

Entrance to the building is through a vestibule, the walls of which are faced in brick and the ceiling boarded in oak. In the banking hall the treatment is as simple as it well can be—a wide barrelled ceiling in cream-washed plaster, a panelled dado, counter and other fittings in grey oak, with skirtings and door architraves ebonized. The floor to the public space is in fawn and black, with the grasshopper in green. All these make up a cool and dignified whole.





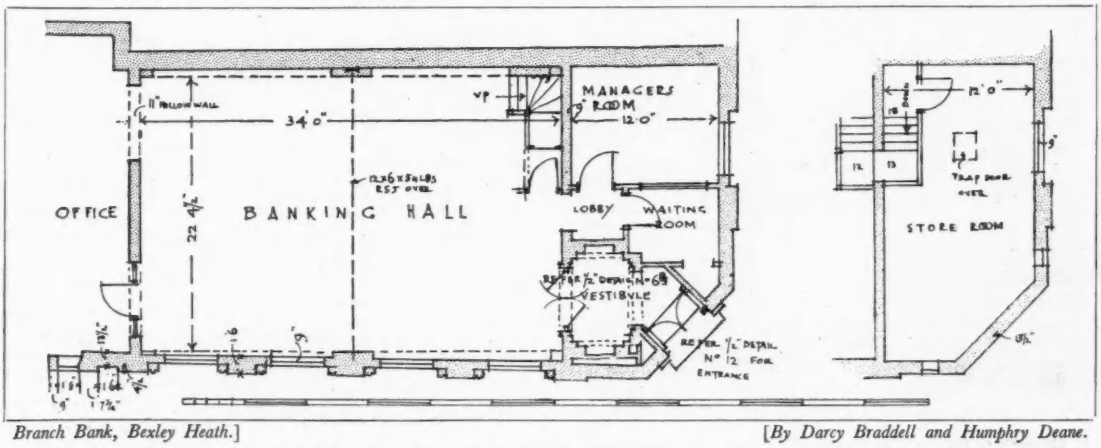
Views of the corner, the only entrance to the bank; and of the entrance vestibule, looking through the doors leading to the banking hall. The sign of Martin's Bank, a grasshopper, is seen hanging above the Portland stone surround of the entrance, and emblazoned in the floor of the brick vestibule. The bank has used this trading sign since its foundation in the sixteenth century.



The banking hall, looking towards the semicircular-headed doorway leading to the vestibule, illustrated on the facing page.



The banking hall, looking from the entrance vestibule. The doors at the far end lead to the clerks' office. On the left are the windows overlooking Woolwich Road. The ceiling is cream-washed plaster, and woodwork is grey oak.



Branch Bank, Bexley Heath.] [*By Darcy Braddell and Humphry Deane.*

Plans of the ground and mezzanine floors. To the left of the banking hall are the clerks' office, cloak room and lavatory accommodation. The mezzanine floor contains a store room and is planned immediately over the vestibule and the manager's room. The vestibule, with its brick walls and oak roof, is a particularly interesting feature.

GREAT BARR COLONY, STAFFORDSHIRE

Recent Additions for the Accommodation of Mental Defectives

DESIGNED BY GERALD McMICHAEL

Units, new and old, grouped about Assembly Hall Workshops



Nurses' Home Observation blocks

An aerial view of the colony, taken flying northwards after passing over Birmingham. The new buildings stand out by reason of their whiteness; the four older blocks, darker in colour, are seen to either side of the central group of three buildings up to which the road leads. On the left are extensive lakes, spanned by bridges.

IT was towards the close of 1911, some years before recognition of the growing need for measures to protect and control mental defectives found expression in the passing of the Mental Deficiency Act, that the Guardians of West Bromwich and Walsall decided upon the purchase of the estate of 413 acres known as Great Barr Park, near Birmingham.

The architect was instructed, at the outset, to prepare plans providing accommodation for 500 patients, and the necessary administrative buildings. Four homes, with a total accommodation of 228, were commenced in 1913. The war interrupted the scheme, and it was only in 1924 that operations could be actively resumed. The provision of a further 342 beds, together with the necessary administrative buildings, was then decided upon.

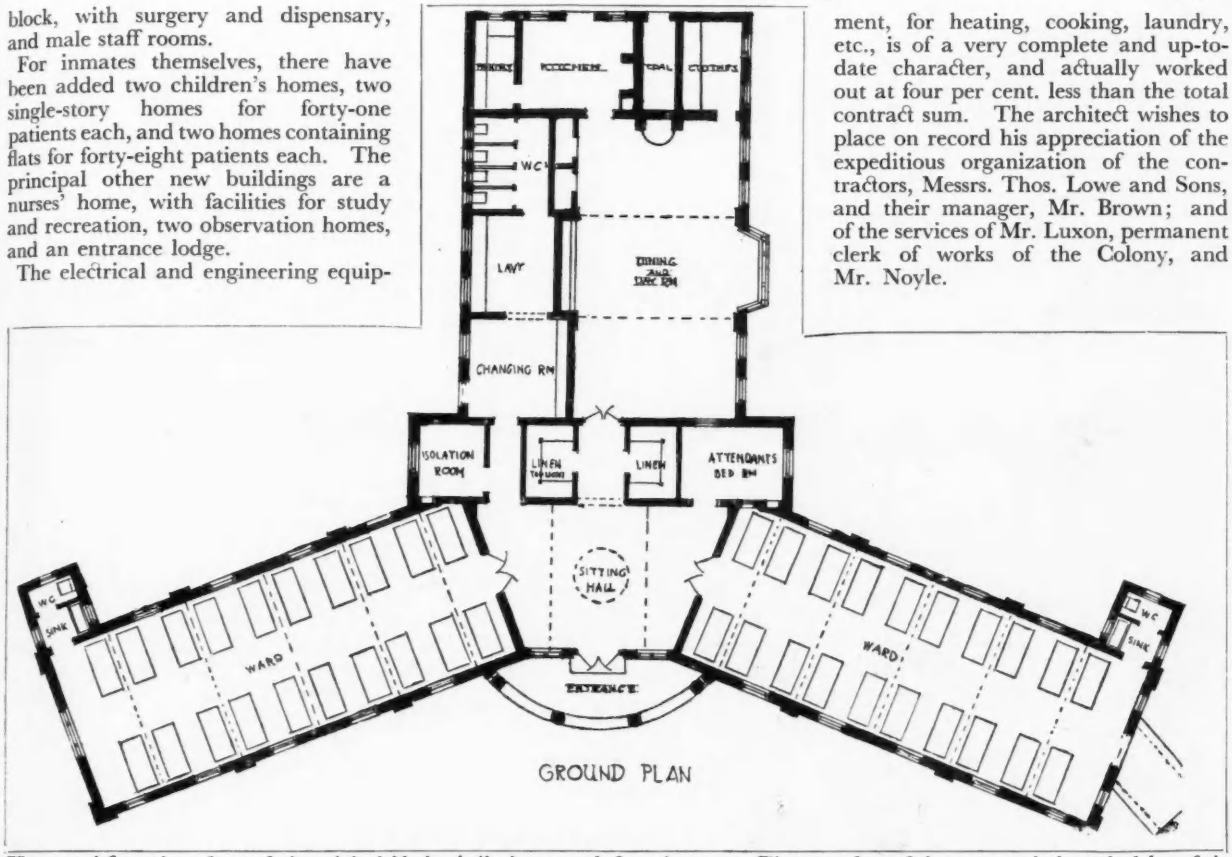
For the older buildings a preference for stucco had been expressed by the joint committee who then administered the affairs of the colony; they were eventually formed of York stone pitch face screeds. By the time the extensions with which we are now concerned were undertaken, building costs had increased, and to meet the difficulties thereby created, the architect suggested the employment, for facing, of white cement and Leighton Buzzard sand, finished with a wooden float. This treatment, then, was adopted as standard for the new work, in combination with sills and dressings of artificial stone, and roofs of Buttermere slates.

The photographs show how agreeably the new blocks group and blend with the old, both types of elevation deriving from a common tradition. It is interesting to compare the older winged plan, somewhat suggestive of an aeroplane, with the new, strictly rectangular treatment. The assembly hall block, which, with its clock tower, is sited centrally on the apex between the male and female sides and dominates the whole, provides a hall, about 45 ft. by 80 ft., to seat over 400 people, with cloakrooms and a cinema box. Flanking it on one side is the matron's block, with a flat for her use, a sewing-room for patients, and rooms for the female domestic staff; on the other, the medical officer's

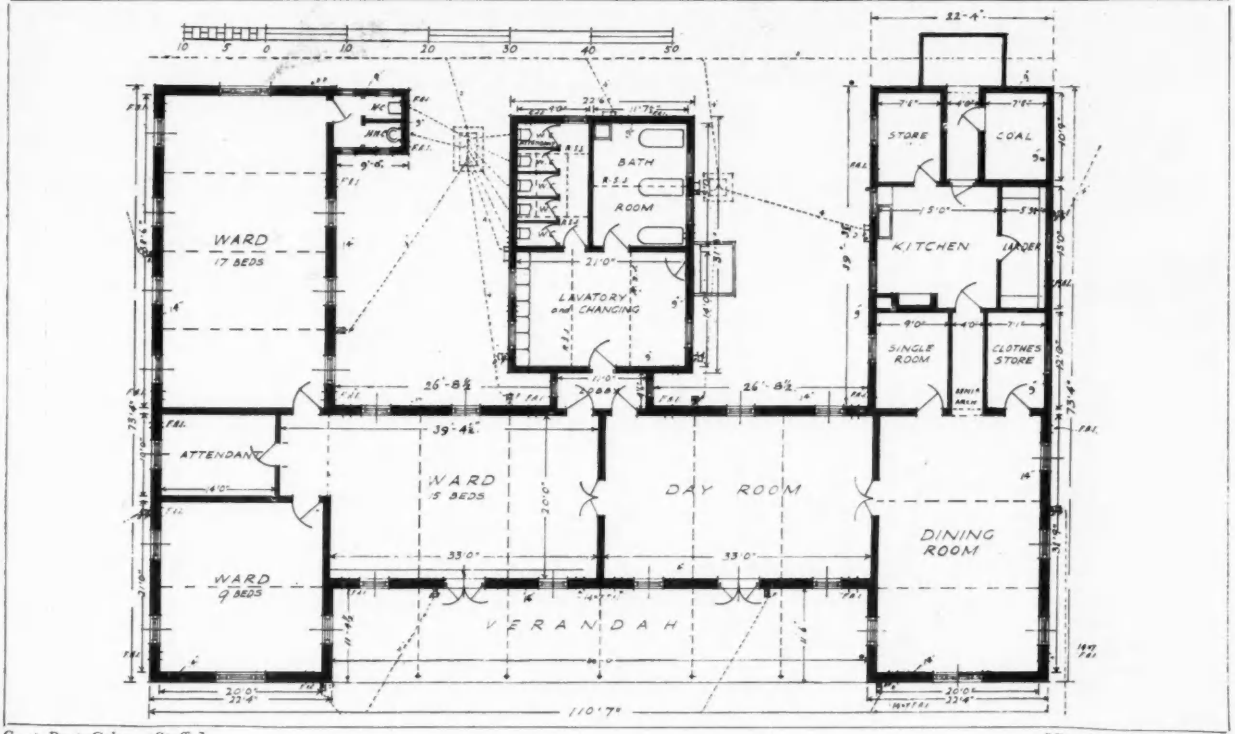
block, with surgery and dispensary, and male staff rooms.

For inmates themselves, there have been added two children's homes, two single-story homes for forty-one patients each, and two homes containing flats for forty-eight patients each. The principal other new buildings are a nurses' home, with facilities for study and recreation, two observation homes, and an entrance lodge.

The electrical and engineering equipment, for heating, cooking, laundry, etc., is of a very complete and up-to-date character, and actually worked out at four per cent. less than the total contract sum. The architect wishes to place on record his appreciation of the expeditious organization of the contractors, Messrs. Thos. Lowe and Sons, and their manager, Mr. Brown; and of the services of Mr. Luxon, permanent clerk of works of the Colony, and Mr. Noyle.



The ground-floor plan of one of the original blocks, built in stone before the war. There are four of these, grouped about the lobes of the heart described by the access roads. They are the darker blocks appearing in the aerial view reproduced on the facing page.



Great Barr Colony, Staffs.] [*By Gerald McMichael.*

The ground-floor plan of a new ward block, to accommodate forty-one patients, reproduced to the same scale as the above drawing. The new structures are economically built in brick, with artificial stone sills and dressings, the walls being faced with white cement and sand.



In this view, on the right, is the original "James Home" for women; on the left, the new children's block, known as the "John Smith Home," of which a plan appears on page 754.

This group of three blocks, consisting of the assembly hall in the centre, with quarters for the matron (left) and medical officer (right), occupies a commanding position at the head of the heart-shaped drive in which the main avenue terminates. The group is flanked on either hand by two of the older winged blocks, as may be seen from the photograph immediately above, and from the aerial view reproduced on page



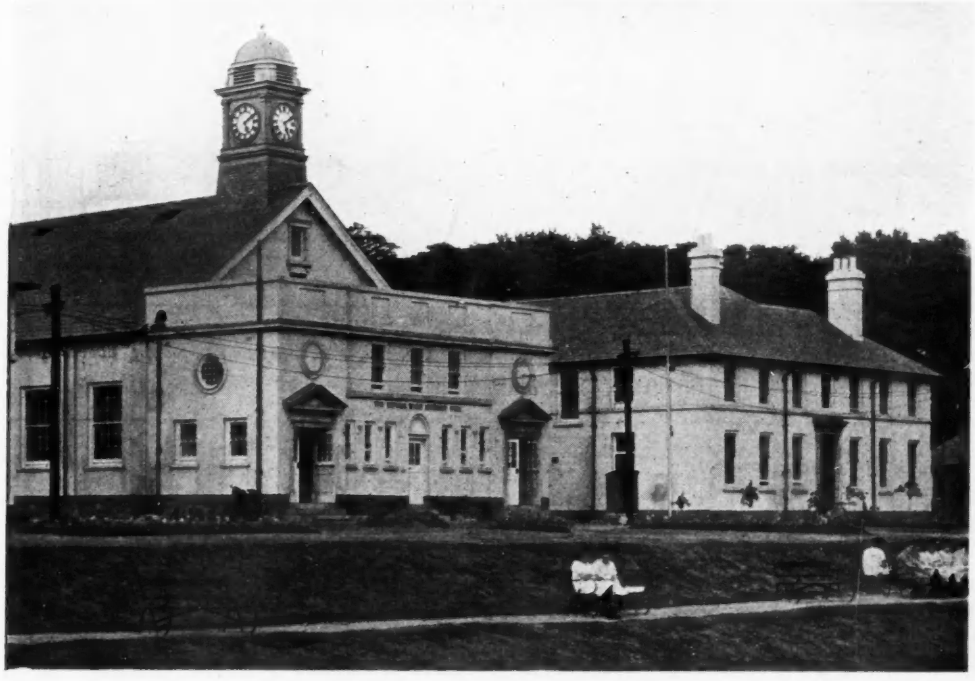


Great Barr Colony, Staffs.]

The entrance lodge and gates, erected where the private avenue, running the length of the Colony's estate, connects with the road to Perry Barr. The piers are of Portland stone, the lodge itself of the same materials as the remainder of the new work.



This companion photograph shows, on the left, the "Lavender Home," another of the original blocks (for girls) and, adjacent, the new matron's block, also illustrated immediately below.



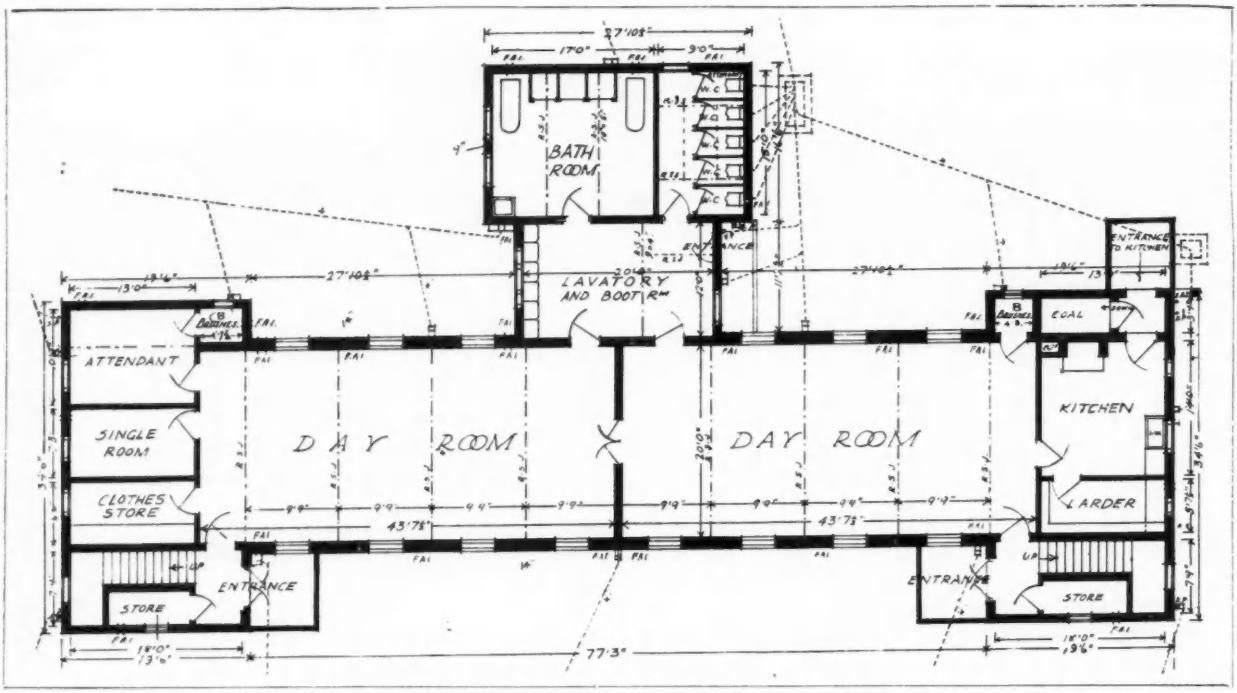
748. The new work is faced with white cement and sand, has artificial stone sills and dressings, and is roofed with Buttermere slates. The assembly hall seats over 400 persons, and has facilities for the projection of films, and for other forms of recreation. The photographs reproduced at the head of these two pages show how the new work, which appears lighter in tone, falls into position and groups with the old.



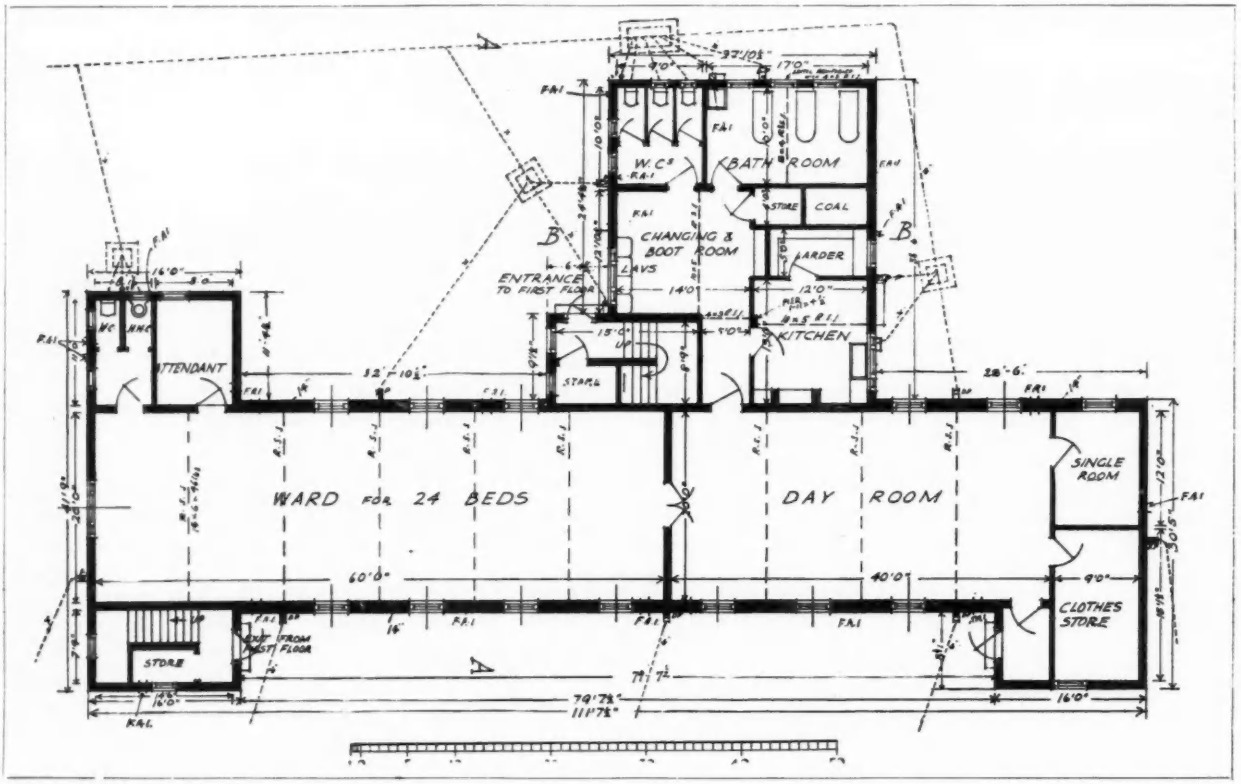
[*By Gerald McMichael.*

The new nurses' quarters, known as the "Hayley Nurses' Home." From the plans of ground and first floors, reproduced on page 753, it will be seen that the accommodation is comprehensive, including rooms for study and recreation, with bedrooms on upper floors.

C



The ground-floor plan of the children's, or "John Smith Home," of which a photograph appears on page 750. In accordance with the prevailing policy, the block is self-contained, having its own kitchen, lavatories, stores, and attendant's room; above are two dormitories, each of twenty-five beds.

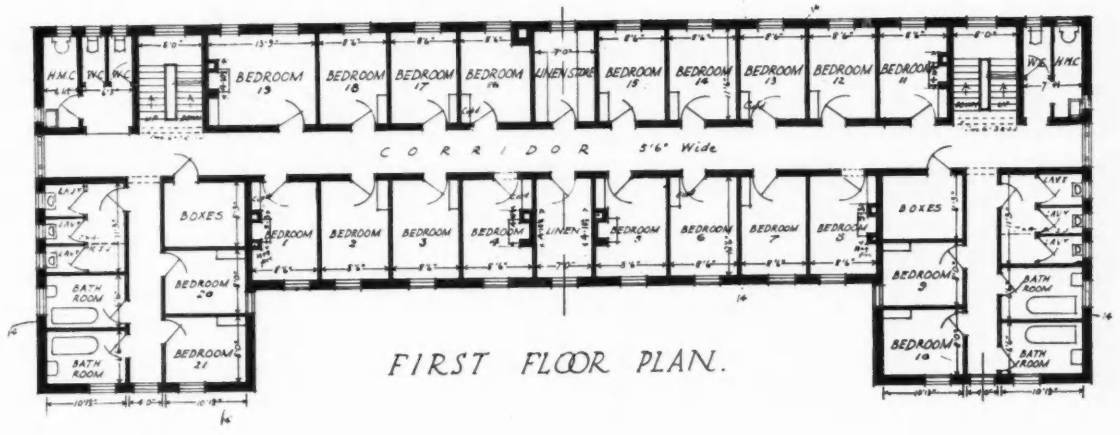


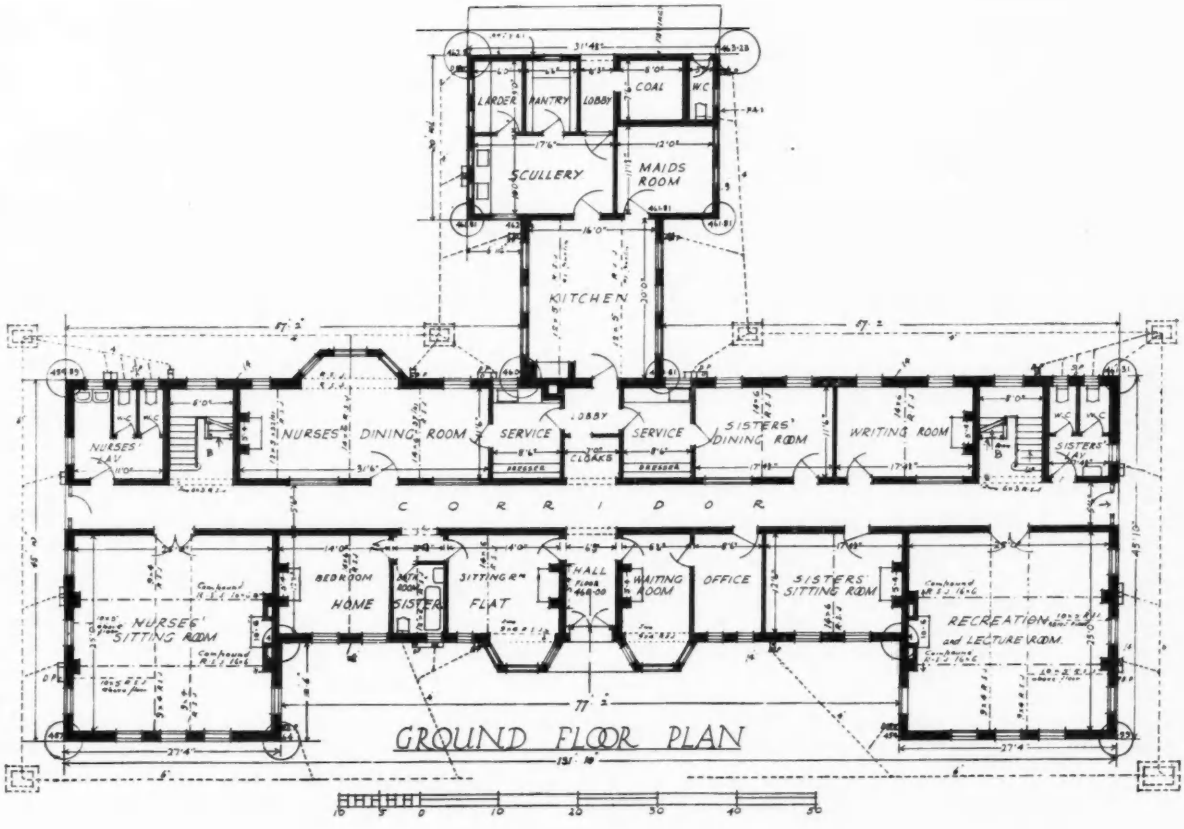
Great Barr Colony, Staffs.]

This is the ground-floor plan of a building designed as two flats, each to accommodate twenty-four patients. The arrangement in the upper flat varies only in minor details. As in the case of the other buildings of which plans are given, it will be seen that the lavatory accommodation is isolated in a wing.

GREAT BARR COLONY.

THE NURSES' HOME.





[*By Gerald McMichael.*

The ground- and first-floor plans of the Nurses' Home, of which a photograph is reproduced on page 751. Corridors run the length of the building on every floor, with branches, at right angles, on the bedroom floors. The site is well away from other buildings on the estate, as will be seen on reference to the aerial view on page 748.

HOW WERE THE PYRAMIDS BUILT?

BY D. DAVIDSON

Approximately 2¼ million blocks of stone were used to build the Great Pyramid, an approximate total weight of 6 million tons. This gigantic mass of masonry was built in twelve years. How was it done? In a paper from which extracts appear below on "Pyramid-building Problems: Man-power Organization in the Pyramid Ages," read before a recent meeting of the Institution of Structural Engineers, Mr. D. Davidson finally dismisses the popular theory, which has been held for more than 2,000 years, that an inclined embankment led up to the Pyramid and was heightened as the Pyramid was raised.

IN a previous paper I dealt with the problem of the design and construction of the Great Pyramid from the standpoint of the engineer designing the structure. The study now presented is an attempt to deal with the infinitely more perplexing problems that concern the working organization of the Pyramid builders for the quarrying, working, lifting, and transporting of stone. I do not advance any dogmatic claim in this relation, in view of the fact that previous engineering investigations have failed to produce satisfactory conclusions.

My contribution is, in consequence of certain material facts of fundamental importance having emerged since previous investigations were undertaken, conducted in the light of them. Since the latter relate chiefly to the time-element of the pyramid-building problem, and, since time is the essence of any organized sequence of building operations, I will deal first with this fundamental element.

The three principal Pyramids of Gizeh were built during the reigns of the first three kings of the Fourth Egyptian Dynasty—respectively known as Khufu, Khafra, and Menkaura. Khufu is the Cheops of Herodotus. The Great Pyramid was built during the reign of Khufu or Cheops, and contained approximately 85 million cub. ft. of masonry. The Second Pyramid was built by Khafra, and contained about 78½ million cub. ft. The Third Pyramid was built by Menkaura, and is much smaller than those of his two predecessors.

The Egyptian priest, Manetho, who wrote in the third century B.C., attributes excessively long reigns to our three Pyramid kings—sixty-three years, sixty-six years, and sixty-three years respectively for Khufu, Khafra, and Menkaura.

Until recently these were generally accepted, together with the statement of Herodotus concerning the operations for and on the Great Pyramid having occupied thirty years. Sir Flinders Petrie put the older opinion in a nutshell when he stated that the "proposal to reduce the period would involve the greater difficulty of the building of the Pyramids in a shorter time." The "proposal" to which Petrie refers is one that has been advanced by a number of eminent Egyptologists for over thirty years. That is that overlapping records of the pyramid-building period and documentary statements, from a period about a thousand years earlier than Manetho, agree in showing that the total period covered by the reigns of Khufu, Khafra, and Menkaura was between sixty and seventy years, or about one-third of the time given by Manetho. This reading of the facts from the contemporary records and from the earliest documentary sources has been established as true by the records in the two tombs recently discovered at Gizeh by the Boston-Harvard Expedition under Dr. Reisner.



This air photograph is by Brigadier-General P. R. C. Groves, C.B., C.M.G., D.S.O., by whose kind permission the reproduction appears. The south slope of the Great Pyramid reveals, on the photograph, a structural feature that does not, so far as is known, occur on any other pyramid. This is a shallow V-shaped depression—only three feet deep maximum horizontally—of the surface of the slope. It occurs on all four slopes, and its form was first inferred by the author, from Sir Flinders Petrie's survey, to be as is now shown on the photograph.

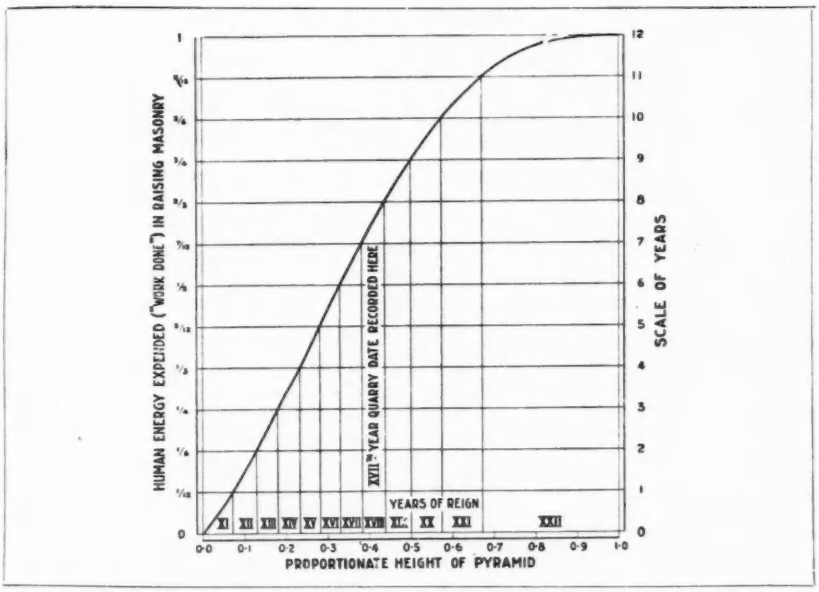


Diagram of human energy expended in raising the Pyramid's masonry to successive levels.

Apart from all this, it is now known that Sneferu, who preceded Khufu, built two pyramids totalling 88½ million cub. ft. of masonry—a quantity greater by 3½ million cub. ft. than Khufu's Great Pyramid. Manetho, however, gives only twenty-six years for Sneferu as against sixty-three years for Khufu. Here, then, is an anomaly in the data from which the time-element of the previous pyramid-building investigations had been derived. It is clear, therefore, that we must accept the evidence of the contemporary inscriptions and of the other early records, difficult as this may be to reconcile with the older accepted time basis for pyramid building; and involving, as it does, what Petrie calls "the greater difficulty of the building of the Pyramids in a shorter time."

Archæological data, from records belonging to periods from 1,000 to 2,500 years earlier than Manetho, all agree in fixing the duration of Sneferu's reign as twenty-four years, and of Khufu's reign as twenty-three years. These, indeed, are the actual durations given for the two respective reigns in the Nineteenth Dynasty List of Kings, known as the Turin Papyrus List. Sneferu's rate of pyramid building—88½ million cub. ft. within a maximum period of twenty-four years—agrees with Khufu's 85 million cub. ft. of masonry built within a maximum period of twenty-three years, and gives Khafra's 78½ million cub. ft. of masonry built within a maximum period of twenty-one years. The duration of Khafra's reign has been erased from the Turin Papyrus, but several lines of independent data from the Pyramid period agree in giving twenty-one years for the reign. One series of data, indeed, yield a total period of years in which all the reigns are known except Khafra's, whose reign requires to be twenty-one years to complete the total.

The Turin Papyrus gives eighteen years for Menkaura's reign. This was more than sufficient for the building of Menkaura's Third Pyramid of Gizeh, which contained only 8⅔ million cub. ft. The four successive reigns from Sneferu to Menkaura inclusive therefore cover a period of eighty-six years, the average reign being twenty-one and a-half years. This accounts for Sneferu's queen—Mertitefs—being alive in the reign of Khafra, as her tomb inscription states. A prince, Sekhemkara, who held office under Khafra, died in the reign of Sahura, the second king of the Fifth Dynasty. By Manetho's absurd chronology, Sekhemkara held office for at least 150 years and lived at least 170 years. By the contemporary inscriptions he held office for more than thirty years and lived for more than fifty years, but not more than seventy-two years.

The essential facts for our investigation are that Khufu, in whose reign the building of the Great Pyramid was commenced and finished, reigned twenty-three years; and that the rate of pyramid building was the same in three successive reigns — those of Sneferu, Khufu, and Khafra. This means that approximately 18 million tons of masonry were quarried, transported, dressed and built in sixty-eight years. Our special problem relates to the building of the Great Pyramid—about 6 million tons in a maximum period of twenty-three years. It would appear that the preliminary works occupied the first ten years of Khufu's reign, that the building work began in his eleventh year and continued for twelve years to the beginning of his last or twenty-third year. A dated record in an originally hidden part of the masonry over the King's Chamber in the Great Pyramid confirms these conclusions precisely, as the following considerations will show.

The total weight of the Great Pyramid's original mass is approximately 6 million tons. The total human energy expended in raising the Pyramid course by course is approximately 1,000 million foot-tons. To obtain a curve of successive stages of human energy expended, I have, however, taken the total energy expended, in raising the whole structure, as unity, and have taken the completed height as unity (see diagram herewith). The equation to the curve is as follows:

Proportion of total human energy expended

$$= 1 - 3a^3\ 1 + 2a^4$$

where a = the fraction of the completed height (taken as unity) that remained to be built to the apex.

Hence, $1 - a$ = the fraction of the completed height to which the masonry had been built.

Thus, when the Pyramid was built to half height, $a = \frac{1}{2}$, and three-quarters of the total human energy for completing the Pyramid had been expended.

Again, when the Pyramid was built to one-third height, $a = \frac{2}{3}$, and 0·506, or practically one-half, of the total human energy for completing the Pyramid had been expended.

These two facts elucidated by our equation—namely, that half the total labour of raising had been done at one-third height, and that three-quarters of the total labour of raising had been done at one-half height—shed a flood of light upon many structural peculiarities of the Great Pyramid.

Since we have seen that the work was carried out with equal intensity on four successive pyramids in three successive reigns, we are safe in adopting the same continuous intensity of labour in each successive year in which a pyramid was being built course by course. This means that during the twelve years of the Great Pyramid's construction approximately the same amount of "work done"—as measured in foot-tons—was performed in each successive year. We may, therefore, on our diagram of "Energy Expended," divide our vertical line of total energy into twelve equal parts for our twelve successive years, and, through the points thus obtained, draw horizontal lines to our curve. From the points at which the latter lines intersect our curve we may then draw vertical lines to the horizontal base line of the diagram. The points thus obtained on our base line give us approximately the elevation attained

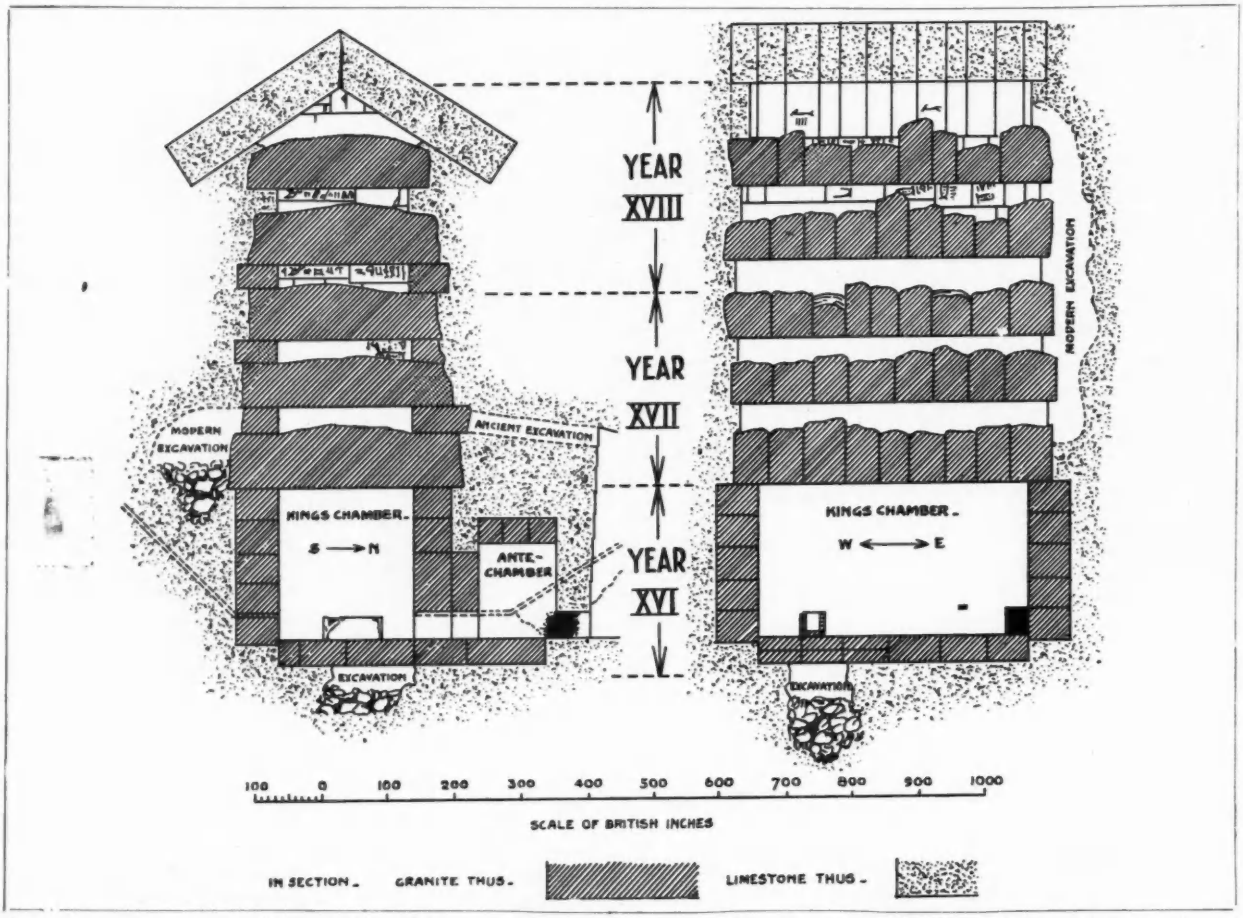
at the end of each successive year's work. The apex-height of the Great Pyramid, as this is indicated by the existing definition of a base side of 755 ft. 9½ ins., and of casing slopes of 51°, 51°, 14″, with the horizontal, was 481 ft. 2 ins.

From our equation or our curve of "Energy Expended" in building we find that the eighth year of construction began at slightly over three-eighths pyramid height, and that this year's work raised the courses by 28 ft. This increment lies between 184 ft. and 212 ft. above the base level, and approximately represents the work done during the eighteenth year of Khufu. It is within the depth of this year's work that the only known dated inscriptions in the Great Pyramid occur (see diagram on this page). These inscriptions are on limestone blocks in the chambers of construction over the King's Chamber, and are merely rough identification markings that were made at the quarries. They mention the names of Khufu and his co-regent, and are dated in the seventeenth year of Khufu's reign. This agrees with these special blocks having been quarried in the year preceding their building into the chambers of construction over the King's Chamber. For these blocks were not regular blocks of the Pyramid's courses, but were a special consignment of variable sizes suitable for cutting and dressing down to fit between the plane under-surfaces, and the extremely variable upper surfaces of the successive layers of huge granite beams that relieve the pressure over the King's Chamber. The isolated inscriptions here do not therefore of necessity prove that the blocks for the masonry courses of the Great Pyramid were still being quarried in Khufu's seventeenth year, but rather indicate, by the necessity for identification, that the limestone quarries were already in extensive use for constructional work other than the Great Pyramid.

However this may have been, our investigation has shown that special blocks, quarried in Khufu's seventeenth year, were built into the Great Pyramid in his eighteenth year, between the two levels fixed by our investigation as the limits for the masonry courses laid during that year. The internal evidence of the Great Pyramid therefore confirms the time-basis of our investigation.

It must be obvious that a prearranged scale of building must have been designed to govern the size and number of blocks for progressive stages of quarrying; in other words, that the supply was designed in successive stages to meet a designed sequence of successive stages in building. Evidence of such designed relationship between rate of demand and rate of supply is provided by the fact that none of the first seven years' stages of building is more than a course under or over ten courses. The eighth year's work completed eighty-two courses—or two courses over the average of ten per year. Five-sixths of the Pyramid's volume was completed at this stage, and from this stage upwards each successive year's work contains an increasingly greater number of courses.

(To be concluded.)



Successive years' work in building the Pyramids masonry from the base course below the King's Chamber to the apex of the chambers of construction over the King's Chamber. The levels of successive years' work are obtained from the diagram on page 755. The inscriptions on blocks laid in year XVIII of Khufu's reign are quarry inscriptions and contain a record of Khufu's year XVII made at the quarry



ENGLISH PRECEDENT No. 115

ENTRANCE PORTICO, NATIONAL GALLERY, TRAFALGAR SQUARE, S.W.1

William Wilkins, R.A. (1778-1839), who built, besides the National Gallery, University College, Gower Street, and St. George's Hospital, was a scholar whose work showed more of refinement than adaptability.

His selection of mouldings was always appropriate and distinguished, as this portico on the Trafalgar Square front abundantly proves, and though the National Gallery exhibits a certain stiffness, this is counterbalanced by the general massing, especially as seen from Pall Mall.

He was handicapped to some extent by having to re-use columns taken from Carlton House.

—[E. MAXWELL FRY.]

LETTERS FROM READERS

MODERNISM AND THE MAN IN THE STREET

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I was interested in the letter of "Layman" on the attitude of the public towards modernist architecture. But I cannot help wondering if he is in any way representative of public opinion, which, I am disposed to think, is on the whole inclined to be conservative.

I would suggest we call it "stunt" architecture. For there is this objection to such architecture being called "modernist"—it tends to bring saner work into discredit by leading the unsophisticated to suppose that architects with a broader culture who base their work upon tradition are nothing more than fossilized conservatives.

But is this the case? Doubtless all architects who base their design upon tradition are in some sense conservatives. But there are conservatives and conservatives. Those of a broader culture accept tradition as a whole, and because they do accept it as a whole they find it very flexible, capable of adapting itself to a variety of conditions, for their aim is always to fuse the new with the old. But the younger generation have for the most part been trained in the schools. They have not been taught to accept tradition as a whole, but to identify the idea of architecture exclusively with the Classic tradition, which they apprehend not so much æsthetically as by a rigid system of rules and proportions. When they go out into the world they find that this rigid scholastic architecture, which is all they know, refuses to adapt itself to modern conditions, and they come therefore to feel that any acceptance of tradition is cramping and paralysing, a barrier to expression. Thus they become rebels, and thus arises modernism in architecture. It is the twin brother of pedantry. Pedantry and modernism are obviously two aspects of the same disease. And it is not without significance that they both find their spiritual home in the schools.

But why do we designate modernism as a disease? Because its progress is from absurdity to absurdity. It is in the nature of things that this should be so because once an architect breaks with tradition he loses his sheet anchor. He comes to feel himself under an obligation to produce something new every time, and as it is simply impossible to produce something new and sane and untraditional every time, it follows that the architect who proposes to himself such an end will tend to become more and more peculiar and eccentric, until reaction sets in and common sense reasserts itself.

Since the nineties so much good architecture upon traditional lines has been done that I cannot see any excuse for the modernist movement of today. There was certainly room for rebellion. But sanity suggests it should have been rebellion against the narrow and restricted attitude towards tradition assumed by Classicists rather than against tradition itself, for such a rebellion would have resulted in a broadening of the conception of architecture, whereas the form it has taken is anarchic and suicidal.

PONDERIVO

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—If one may use the term "General Public" in place of "The Man in the Street," I have no hesitation in saying that the modern trend of design is undoubtedly appreciated.

The term "Man in the Street" conveys to me the impression of one who is merely an onlooker, uninterested save from a mildly æsthetic point of view, which is quite valueless. The "General Public," on the other hand, comprises everyone, and the shopman, theatrical manager or hotel keeper are all increasingly showing their keen appreciation, by the fact that they have definitely accepted the new order of things.

I do not believe for one moment that the great change in feeling throughout the civilized world for simpler and more direct design, in all branches of art, has come from any one man or set of men. The demand came from the "General Public" more or less unconsciously, and it has naturally followed that the designers of the younger generation have leapt to meet it and provide what was being called for.

Hygiene, the servant problem, reinforced concrete construction, economy, and the stark realities of the war are a few of the many causes of this demand by the "General Public" for greater simplicity.

MAXWELL AYRTON

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—My own experience, so far as it goes, is that the layman is rather sympathetic to the simpler kind of modern work; that is to say, work which is not too strained and mannered and which carries on the face of it a due sense of its proper function in its relation to himself—work, in fact, that he can, on the whole, understand.

It is the esoteric which frightens the layman, and he is just as likely to be frightened by an exaggerated cubism (which can be just as unreal and illogical as any other style) as by the subtleties of classical proportions.

CHARLES HOLDEN

R.I.B.A. BUILDING COMPETITION

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I happened to see last week's issue of THE ARCHITECTS' JOURNAL, and the fact that it contains a letter written by a layman has given me the courage to suppose that you may not think it over presuming of me, as a layman, to offer a comment on the Architectural Competition which the R.I.B.A. is instituting in order to find a designer for its new building.

I may be all wrong in my ideas, and what I am going to say may be the purest nonsense, and rank heresy into the bargain. All the same, it occurs to me (as I think it will occur to many other laymen) that, whatever architects are selected to judge the designs submitted in the competition, there will remain one very big drawback to the whole scheme.

Assuming that the jury is selected by a concensus of opinion of the rest of the profession, and is composed of five members, each of these five may be taken as the best man in his own sphere of thought. In other words, he is exactly the man who should be himself competing and submitting a design. Which is tantamount to saying that you are automatically debarring the best men from taking part in the competition!

Now this is where my heresy begins. Would it not be a reasonable thing to select the jury from the other nations whose architectural style is acknowledged to be scholarly and fine—one from Sweden, one from America, one from France, one from Germany, and so on?

In this way all the men of recognized ability and prestige throughout the British section of the architectural profession would be eligible to compete; and at the same time a careful selection of foreign architects would ensure just the same catholicity of general outlook as would the scheme which you have outlined in last week's JOURNAL.

ANOTHER MAN IN THE STREET

ROYAL ACADEMY EXHIBITION

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—From illustrations in last week's issue of the JOURNAL I note that architectural perspectives have been included in this year's Exhibition.

Some time ago, hearing that perspective drawings were to be excluded, I wrote to the Secretary of the Royal Academy and received the enclosed notice. When I applied for labels in

March, a similar notice was included with the labels. In view of the issue of these notices, the inclusion of perspective drawings in the Exhibition would appear to be very unfair to many members of the profession who, on account of these notices, refrained from submitting perspective drawings for this year's Exhibition.

C. B. WILLCOCKS

Following is the notice referred to in the above letter :

ARCHITECTURAL EXHIBITS, 1930

It has been decided that for the Royal Academy Summer Exhibition of 1930 the Architectural Exhibits of Members will be limited to Geometrical Drawings not exceeding ½-in. scale ; and that preference will be given to such Drawings submitted by Non-Members.

"FOOL-PROOF" DOORS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—In reference to the calamitous cinema fire at Paisley, why do not local authorities model their regulations on lines similar to those of the London County Council, which insists on "fool-proof" doors and devices ?

G. B. J. ATHOE
Secretary, Incorporated Association of Architects and Surveyors.

THE SKETCH CLUB

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I have been a regular and very interested reader of your JOURNAL for some years, and I am delighted to learn that you have formed a Sketch Club. I am an architect and a keen sketcher, and I, with many another fellow architect-sketcher, will now watch with the keenest interest the Sketch Club and what it will bring forward.

An architect's work always shows him with his best behaviour—or it should do. It is when he takes up a pencil, pen, or brush for his own amusement that we see behind the scenes. What a joy this is going to be for us ! Almost it will be as joyous to wait for as was that treasure, *The Honeywood File*.

WILFRID T. QUAYLE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—As a regular reader of THE ARCHITECTS' JOURNAL, I welcome with the greatest pleasure the introduction of the Sketch Club, and feel sure that a great deal of good will be done as time goes on, especially if the services of an expert could be obtained to give advice and criticism.

CLAUDE J. W. MESSENT

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I was very pleased to read about the Sketch Club. I am an architectural assistant and sketch whenever I get the chance.

FRANK M. COOMBS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I am very much interested in your Sketch Club and should like to submit one or two sketches.

MAXWELL AYRTON

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I think the idea of the Sketch Club is excellent and should form an interesting feature of your paper.

F. MORRALL MADDOX

CHARING CROSS BILL REJECTED

BY OUR SPECIAL REPRESENTATIVE

ON Tuesday, May 6, the Private Bill Committee of the House of Commons, which has considered the London County Council (Charing Cross Bridge) Bill, met once more and rejected the Bill. Sir Henry Cautley, the Chairman, said that the Committee remained of the opinion that to put the new station at the bridge-head was a blot that they could not accept. It would stop the development of Lambeth.

Sir Lynden Macassey, K.C. (for the London County Council), gave details with regard to a printed statement put in by the L.C.C., which recalled that when the Committee adjourned on April 10, they requested that a thorough investigation should be made into the possibility of finding some site for the new station on the Lambeth side of the river other than the Lion Brewery site. The L.C.C., in co-operation with the Southern and Underground railway companies, undertook a renewed examination of numerous alternative proposals, including that of the Lambeth Borough Council, for placing the station on the Waterloo Junction site, and instituted a detailed comparison of them with the scheme of the Bill. Of five possible alternative sites for the new station that had been indicated by the Committee, the L.C.C. decided that the best (with the new station south-east of Waterloo Station between Westminster Bridge Road, Oakley Street and Waterloo Road) was definitely inferior to a scheme showing a new station at Waterloo Junction site more or less balancing the existing Waterloo Station about Waterloo Road, which they regarded as the best of four alternative proposals to place the new station on the Waterloo Junction site.

The Council were firmly of opinion that the provision of a new road bridge at Charing Cross was definitely dependent upon the removal of the present Charing Cross railway station to the south side of the river. Accepting that as a fundamental condition, they were convinced that there was no other practicable site for the new station than the Lion Brewery site, which had been adopted in the scheme of the Bill. "This being the considered conclusion of the Council," the statement concluded, "in which the Minister of Transport concurs, the Council think that they would be wanting in candour to the Committee if they failed to convey to the Committee in respectful but definite terms that, should the scheme of the Bill be not accepted, there is no alternative scheme which the Council could accept the responsibility of submitting to Parliament. The Council therefore feel it their duty to state that, if the scheme of the Bill is rejected, they see no prospect of securing the national improvement represented by a new road bridge at Charing Cross."

After the Committee had consulted in private, the Bill was rejected.

The Government's Slum Bill

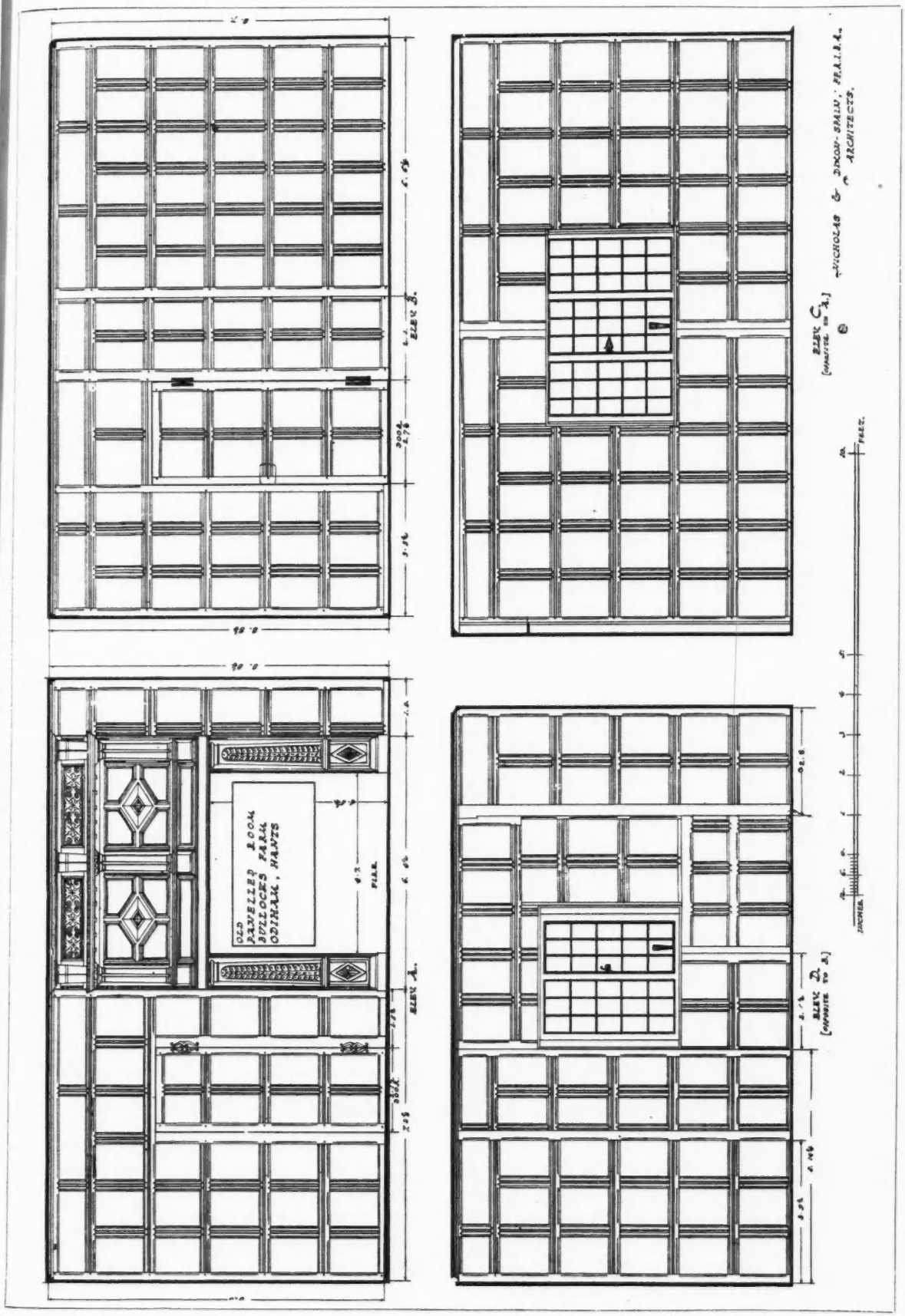
Slow progress is being made with the Government's Bill for dealing with the slums, and, at the end of the second sittings of Standing Committee "A" of the House of Commons, clause 1 had not been disposed of.

Clause 1 provides for the declaration by local authorities of unhealthy areas as clearance areas, with a view to the demolition of all buildings therein. At the first day's sitting the Government accepted an amendment, moved by Mr. Percy Harris, a Liberal member, designed to make it clear that a clearance area might include buildings other than dwelling-houses. He said that he brought forward the amendment at the request of the London County Council.

An important amendment was then moved by Mr. Chamberlain, limiting the buildings to be demolished in any clearance area to dwelling-houses. He explained that his object in moving the amendment was to obtain from the Government some information as to the intentions of the clause in this respect.

Mr. Greenwood, the Minister of Health, said that a clearance area would not necessarily be a solid mass of buildings. It might have islands in it which would not constitute part of the clearance scheme. There might be public buildings, churches, and so on, which would form no part of the clearance area and would obviously remain. The intention was to make a clearance area an area which consisted entirely of buildings, including houses that were either unfit for human habitation or injurious to the public health,

(*concluded on page 762*)



The four elevations of an old panelled room in Bullock's Farm, Odiham, Hants. Measured and drawn by Nicholas and Dixon-Spain. The room is approximately 15 ft. in length, 14 ft. 6 ins. in width, and 8 ft. 6 ins. in height.

because of their bad management, and entirely to clear that area.

The amendment was still under discussion when the Committee adjourned, but at the second sitting Sir William Jowitt, the Attorney-General, said that by the definition of "area" which appeared in the clause, it was impossible to conceive of an area within the meaning of the Bill which contained in it a good dwelling-house. It must be an area exclusively composed of dwelling-houses or buildings which were either unfit for human habitation, or bad by reason of the narrowness or bad arrangement of the streets.

Mr. Chamberlain said in many cases it would be extremely difficult to determine whether a building should come in or remain out of the clearance area. Great care must be taken to prevent the possibility of local authorities including in a clearance area buildings which ought to be left out, and there was a danger that cleared sites might be left derelict for indefinite periods.

Mr. Greenwood said he was prepared to consider later whether any words could be inserted which, without altering the substance of the clause, would make the position clearer, but he thought the intentions of the clause were sufficiently manifest. He did not believe that any local authorities would allow cleared areas to remain derelict indefinitely, but, if they did, he would rather see a derelict area, unsightly as it might be, than leave slum dwellings on it.

Mr. Chamberlain withdrew his amendment and, after some further debate, the Committee adjourned.

In Parliament

Post War Housing Schemes

Mr. Greenwood, the Minister of Health, in bringing forward the Ministry of Health Estimates recently, referred at some length to the general housing position. He explained that, up to March 31 of this year, there had been completed since the Armistice, in connection with State-aided housing schemes, 939,000 houses. Of these, rather over 174,000 were built under the 1919 Act, 39,000 under the Housing (Additional Powers) Act, 436,000 under the 1923 Act, and 288,000 under the 1924 Act. At the end of March this year there were, under the Act of 1924, over 28,000 houses actually under construction, between 17,000 and 18,000 definitely arranged for but not actually started, and a further 13,000 or more authorized but not yet definitely arranged for, making over 59,000 in course of erection or in process of arrangement. In addition, a considerable number of houses had been built without State assistance of any kind, and, up to March 31 last, this private building without Government assistance accounted for about 520,000 houses. So that, since the end of the war, the total number of houses actually completed in England and Wales amounted to 1,459,000. There had been a fall during the last year or two in the cost of house building, and that reduction in prices had up to the present been generally maintained. For non-parlour houses, the price in March of this year was £338. Since 1923 no less than £68,000,000 had been sanctioned as loans for the purchase or erection of houses under the Small Dwellings Acquisition Act. Slum clearance had gone on slowly, but that situation would be met by the new Bill. Although not enough had been done to cope with the housing problem, since the war we had spent, from the Exchequer, on housing no less than £85,000,000.

At question-time, last week, Mr. Greenwood stated that the total number of houses completed in England and Wales since the termination of the war up to March 31 last, including houses of a rateable value not exceeding £78 (or £105 in the Metropolitan Police District) erected by private enterprise without State assistance, was approximately 1,463,000. The number of houses erected by local authorities was 527,769, and the great majority of these were built for letting.

Hadrian's Wall

Sir Kingsley Wood asked the First Commissioner of Works whether he could make a statement in relation to the present position with regard to Hadrian's Wall.

Mr. Lansbury said that the whole of the questions connected with the proposed quarry were under his active consideration. The House would be glad to know that the quarry was not in being, and that there was no immediate danger to the surroundings of the Wall.

Mr. Hacking asked the First Commissioner of Works whether he would make a statement to the House regarding his proposals to alter the environment of the monument in Trafalgar Square.

Mr. Lansbury said it was not proposed to make any change in the appearance of Trafalgar Square, but his department had agreed in principle to the construction of an underground transformer station beneath the Square, provided adequate measures were taken to safeguard the Nelson monument, and subject to the approval of Parliament to the Bill which would be necessary.

Calton Jail Site

Mr. Mathers asked the First Commissioner of Works if he could now inform the House whether the suggested design of the buildings to be erected upon the Calton Jail site, in Edinburgh, had been approved or rejected by the Scottish Fine Arts Commission; if approved, could he indicate when building was likely to commence; if rejected, would he state what further action he proposed to take; and would the existing model be submitted to the Edinburgh Corporation for consideration.

Mr. Lansbury said that the Report of the Royal Fine Arts Commission for Scotland was unfavourable to the scheme which was submitted: the whole question was now receiving his careful consideration.

LAW REPORT

SEALED BILLS OF QUANTITIES: COSTS

Willcocks and Barnes v. *Paignton Co-operative Society. King's Bench Division. Before the Lord Chief Justice, Lord Hewart*

THE action of Willcocks and Barnes, builders and contractors, of Paignton, Devon, against the Paignton Co-operative Society was mentioned to his lordship.

The case was heard by his lordship at the last Exeter Assizes, the builders claiming damages for alleged breach of contract by the Society to employ them to do certain work.

They alleged that the Society called for tenders and sealed bills of quantities, promising not to open the sealed bills unless the tender was accepted. The Society's representative, the plaintiffs alleged, opened the bills of quantities and then gave the tender to another firm. They contended that the Society had in consequence broken a contract to employ them.

The Lord Chief Justice, however, found for the Society, holding that the opening of the sealed bills of quantities could not be implied as an acceptance of the tender.

The present application was in regard to the costs of the litigation.

Mr. du Parcq, K.C., for the builders, argued that his clients should have the costs. His lordship would recollect that he said that the plaintiffs had been shabbily treated. In the circumstances, he asked that plaintiffs should have the costs.

Mr. Croom Johnson, K.C., for the Society, argued that his clients should not be deprived of their costs.

His lordship said he agreed that plaintiffs had been shabbily treated, and he would have been glad to have deprived the Society of costs if he was entitled to do so. But he would resist the temptation because plaintiffs had misconceived their remedy. They might have succeeded in a different class of action. In the circumstances, the Society, successful in the action, would get the costs.

LEIPZIG'S NEW CLOCK-JACKS

THERE is nothing petty about the two clock-jacks that crown Dr. Bestelmeyer's new bank building in the Augustusplatz, Leipzig; their elevated position, above the twelfth story, calls for an exaggeration of size. Dignity and robustness in the design have clearly been the aim of the sculptor, Prof. Wackerle, but in judging their accentuated physique this remoteness has to be remembered. Eyes and mouth have a stark hollowness, emphasized to convey to those below a semblance of human expression.

When the moment for striking arrives these 12-ft. giants each give a quarter turn, from the hips upwards, their hammers then pointing out to the street. On the command of the mechanism that swiftly returns them to their original position, the 6-f. hammers, weighing 1 cwt., come crashing against the bells, and the sound of the hour flies down to the busy city below. The bodies are of wrought copper, and up through the legs come the impelling shafts that turn their trunks about the axes, a horizontal toothed wheel within playing its part in this action.



A general view of the bank, the Hochhaus, in the Augustusplatz.





(Above)
A detailed view of the two clock-jacks, 12 ft. high, that strike the clock bells, mounted above the twelfth story of the Hochhaus.

(Left)
This photograph illustrates the hanging of the three bells, one within another, and also the moon-ball, another medieval motive, above the 14-foot clock dial.

These Hochhaus bells are cast in bronze; they are disposed in an original manner, concentrically and partly within each other. The largest and uppermost strikes the hours; the middle one is struck every quarter-hour by the younger giant, on the left; the third, by means of a hidden hammer, is made to give an echo of the quarter-hour bell, a novel and interesting effect.

The gilt numerals of the clock dial are retained in place by two circular bands, having the large diameter of 14 ft., and set on the level of the eleventh story. The hands are of copper-gilt. The weight that drives the clock falls through a drop of two floors and has a bed of sawdust beneath, should any untoward incident bring down its half-ton mass. This weight and the two whose sudden drop causes the figures to strike are raised by a 2-h.p. motor. The movement is a 30-hour one, but as the electrical rewinding is done every hour there is always power in reserve.

Two ornamental balls rising from the corners of the roof find an echo in the stone relief balls upon which rest the paws of the two carved lions. The eye then passes to another feature: the moon-ball in blue and gold, equally a revival of a medieval idea.

J. N.

READERS' QUERIES

ILLUMINATION OF A SWIMMING BATH

A. E. F. writes: "*I am the architect for a swimming bath, 80 ft. long, 24 ft. broad and 22 ft. high from water level to joists, and 31 ft. 6 ins. to apex of roof. It is intended to use the bath after dark for water polo, etc. The problem of deciding upon the best method of lighting is difficult, and one on which I should value your expert's opinion. The building is in steel construction; there are six bays, joists being spaced at intervals of 13 ft. 4 ins. from centre to centre. The problem is to avoid the casting of shadows from the joists and at the same time to place the lights high enough to give good general illumination without areas of uncertain lighting. To secure a good overlap, the lights should probably be placed as high as possible, but to avoid the shadows referred to they should probably not be above the level of the joists themselves. Can you tell me how many lighting points would be desirable and approximately what their position should be?*"

The industrial diffusing type of unit, which is marketed as the glass-steel diffuser, has been employed with success in a number of swimming baths, since it enables a comparatively high illumination intensity to be obtained from sources of light diffused in nature, and consequently free from the intense brightness of ordinary direct lighting fittings which give rise to glare. If the structure is taken as indicated by the architect, satisfactory illumination could be provided by the use of 16 500-watt glass-steel diffusers, mounted level with the tie bars and spaced 12 ft. apart on the cross section and 15 ft. apart on the longitudinal section. These units should be installed in between the tie bars on the plan, and will provide an illumination intensity of 10 ft. candles at water level.

The above scheme, since it employs individual units, will naturally give rise to reflections on the water surface which may prove annoying during the progress of water polo matches.

Therefore, an alternative method of lighting which entirely eliminates the objections indicated in the above comment can be achieved by building a coved ceiling, the top of which comes level with the tie bar. This coved ceiling can be then illuminated on the indirect principle from a series of small lamps installed in the cornice (which should be of suitable dimensions).

To achieve the same intensity of illumination as that indicated in my first suggestion, it will be necessary to install 60-watt Pearl lamps on 9-in. centres in both cornices along each side of the building, which would give an approximate total load of 8,000 watts.

This system is particularly effective for bath lighting, due to the fact that the ceiling becomes a source of light and is of comparatively low brightness. It does not prove objectionable to the eyes, while the effect rather resembles an open-air bath, since the evenly-lighted ceiling gives the effect of an open sky. R. W. M.

MISSION HALL ROOF TRUSS

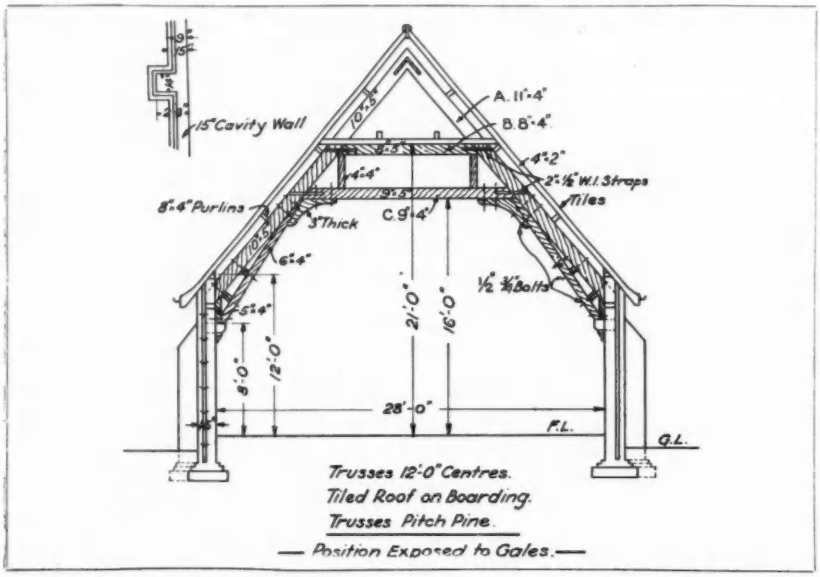
G. C. writes: "*I should be glad if you would kindly give me your opinion on the following three questions regarding the mission hall roof truss shown in the accompanying illustration: (1) Is the design faulty? (2) Are the timbers strong enough; if not, what sizes do you suggest? (3) Is the design extravagant in any way? If so, how can it be cheapened, without spoiling the appearance? I do not wish to use tie-rods if they can be avoided.*"

The mission hall roof truss is quite reasonable in design, in view of the desire to avoid the use of tie-rods. The timbers shown are quite strong enough, but because of the necessity of a large safety factor it would be undesirable to reduce the stress.

A difficulty with this type of truss is that, although there is ample strength when first made with all the joints close and sound, the inevitable shrinkage in timber of such width alters the ultimate points of contact and bearing somewhat, and upsets fine calculation of stresses.

The cost of the truss would be considerably lessened by making the main members *A* of 11 ins. by 4 ins. instead of 10 ins. by 5 ins., the former being a market size, which 10 ins. by 5 ins. is not. In addition to the lower cost of these members there is a distinct advantage in the deeper section in its resistance to bending. Since the members *B* and *C* are only in tension, they can quite as well be 8 ins. by 4 ins. and 9 ins. by 4 ins. respectively, 8 ins. by 5 ins. and 9 ins. by 5 ins. being expensive sizes.

The iron straps, however, are essential. I would also suggest the use of $\frac{1}{2}$ in. instead of $\frac{3}{4}$ in. bolts. A. H. H.



A mission hall roof truss designed to avoid the use of tie-rods. [*See* answer to G. C.]

A SUBSTITUTE FOR LEAD FLASHING?

A. R. T. writes: "*Is it safe to use cement mortar in place of a lead flashing on a cottage with a 50° tiled roof and parapet gables? Most people, I believe, seem to consider mortar in this position to be unreliable and liable to cracks, but I see that Mr. Penty in his extremely interesting book,* The Elements of Domestic Design, *advocates the use of cement mortar in preference to lead flashing. I should, of course, prefer to use mortar if possible.*"

I have used cement listing instead of flashings for chimney-stacks on a number of jobs.

Only on one occasion had I trouble, and that was due to the fact that the cement was put on during hot weather. I may add that I first used cement listing at the suggestion of a builder for the sake of economy.

It may be that lime mortar gauged with cement would be preferable as being less liable to cracks. But I have never made the experiment.

A. J. PENTY

CONSTRUCTION OF DEW PONDS

L. H. C. writes: "*Can you give me any information respecting the construction of dew ponds, giving, especially, particulars of position, size, and materials used?*"

[The Editor invites readers to reply to the above inquiry.]

NAMING THE FIVE ASSESSORS

THE response to the invitation of the Editor of THE ARCHITECTS' JOURNAL to his readers to suggest the names of the five assessors for the competition for the new R.I.B.A. premises in Portland Place has been most gratifying. Two days, however, still remain before the invitation closes, and for the benefit of those readers who have not yet recorded their views the nomination form is reprinted on page xl of this issue.

The competition for the new building will be open to all members of the R.I.B.A. or of any allied society, and will be assessed by a jury of five men, to be selected by Sir Banister Fletcher, the President. In making his selection the President will be largely guided by the suggestions placed before him by members of the profession.

Obviously, the competition is no ordinary one; it is an event the result of which will vastly influence the future of the profession for many years. It is, therefore, of vital importance for everyone to record his *reasoned* suggestions for a really representative jury, one able to represent the different trends of opinion that are found in architectural circles today. This question of the jury is one of the most serious the profession has ever had to answer.

Any reader who has not already filled in the Editor's nomination form should do so now : before doing so he should consider carefully the following questions :

What kinds of parties do you want to see represented ? What sort of attributes will you look for in this bench of judges to whom so much is being entrusted ? One elderly, experienced, slow to enthuse, accurate in his judgment ? One young, keen, plucky, willing to consider and even accept the unusual and untried ? Would you wish to see learning and tradition given their place ? Do you feel that the great provincial towns, and even the Empire, may have a point of view which differs from that of London men, and which should find expression on the jury ? You will have your views on all these matters and on many others of equal importance, perhaps. From Le Corbusier to the woman architect, your mind will range over the whole of modern theory and practice. Which five outstanding ideas or qualities will you select ?

Pick the five. Put the ideas down in the appropriate spaces on the form which appears on page xl of this issue of THE ARCHITECTS' JOURNAL. Then, and then only, fill in the names of the persons best capable, in your view, of representing these sections and of making a wise and sensible choice on their behalf. Cut out this form and send it to the Editor, THE ARCHITECTS' JOURNAL, 9 Queen Anne's Gate, S.W.1, not later than first post on Friday, May 16. The views submitted by our readers will be analysed in THE ARCHITECTS' JOURNAL. They are meant to be directly useful, and will be placed before the President of the R.I.B.A. without delay. It is expected that the President and Council will discuss the composition of the jury some time in June.

SOCIETIES AND INSTITUTIONS

ARCHITECTURE AS AN AID TO TRADE AND COMMERCE

MR. J. R. LEATHART, F.R.I.B.A., delivered a lecture on the above subject at a meeting of the City of London Tradesmen's Club, held at the Cannon Street Hotel, E.C., on Thursday last.

Mr. Leathart began by saying that the title of his lecture did not imply that architecture was a panacea for trade depression; its aid to trade and commerce was a financial one, of course, but at the same time it was also a psychological one too. The axiom that building activity followed an era of industrial and trade activity had not been entirely substantiated during recent years. The spasmodic trade boom which followed immediately upon the Armistice faded by the end of 1921, and was not sufficiently fundamental to create the abnormal expenditure on buildings throughout the whole of the United Kingdom which had been incurred since then. The reverse of this state of affairs was to be expected, for the building trade usually acted as a most delicate barometer, and depression in industry should be reflected, with but a short interval in acute depression in building. In point of fact a halt had already been called in provincial work, especially in the industrial districts, although there was yet no indication of any easing off in building in London, particularly in the City.

He said he added the adjective "modern" to the title of this address, as the examples he had selected as illustrations were all indicative of the determined attempts being made at the present time both here and abroad to create new and simpler forms of architecture as distinct from the traditional means of expression which were rapidly becoming sterile with over-use.

The definitions of architecture were so many and so diverse that it was becoming increasingly difficult for an architect to give a satisfactory explanation of the art which he practised. It was usually assumed that architecture was concerned solely with the embellishment of building. If this were so, he (Mr. Leathart) did not pretend to say how it could be of any assistance whatever to trade and commerce. He would be merely wasting time to tell them that by merely decking the front of a commercial building with columns, cornices, and ornamental windows and doors, the business carried on within the building would be improved. There were many instances in important commercial buildings in the City where this striving for architectural veneer was an actual detriment to the proper functioning of the building. One particular commercial palace the lecturer had in mind had a series of semi-circular windows on one floor actually at floor level with the crown of the arch below eye-level. Now, these windows did not light the offices at all, and the unfortunate occupants of these rooms had been termed martyrs in the sacred cause of Italian Renaissance architecture. It was amazing how the obsession with external appearance on the designer's part had so gravely prejudiced the successful use of this building. He would cite this as an example of bad building and bad architecture, and left to the audience's imagination the effect of this doubtful manœuvre by the architect on the minds of his clients.

We should, he stated, probably look in vain for a modern city building which had not its quota of columns and architectural trappings, that was if we were able to look above the ground story without running the risk of colliding with fellow-pedestrians or being run over in the narrow City streets. We should see, if we were able, valuable space on the façades of the buildings sacrificed to some meaningless piece of architectural design which would have been better utilized by window openings; also unnecessary ledges, recesses and whatnots upon which dust and grime collected and pigeons nested. As modern business methods were evolved from the haphazard system existing in the past, as improvements in centralization, in administration, in staff efficiency and organization, were matters of everyday occurrence, so architectural design must clear itself from the customs and traditions which had bound it since the time of Sir Christopher Wren.

The lecturer divided his illustrations into three groups of commercial buildings—factories, shops, and offices—and showed examples of each group taken from England, America, France, Holland and Germany.

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION

The annual meeting of the Hampshire and Isle of Wight Architectural Association was held at Winchester on Saturday last. Mr. J. Arthur Smith, F.R.I.B.A., the President, occupied the chair.

The business meeting was quite short, and the reading of the eighteenth annual report of the Council by the honorary secretary, Mr. A. L. Roberts, F.R.I.B.A., was punctuated by applause.

In the report it was stated that there had been a steady growth of membership, there being a gain of fifty-four members (three honorary members, five Fellows, and forty-six Associates) during the year, making a total membership of 238 (thirty-six hon. members, ninety-four Fellows and 108 Associates). There has been only one resignation, owing to removal, so that the net gain on the year is fifty-three. The President has again been appointed on the Council of the R.I.B.A., and Mr. A. L. Roberts has been appointed representative on the Board of Architectural Education. £33 2s. had been paid out in grants and subscriptions, including £10 10s. to R.I.B.A. maintenance scholarships and £6 6s. to the Architects' Benevolent Society; and £32 out of £52 10s. required had been raised for a special donation towards the same society. The Association is working in connection with the Hampshire Rural Community Council to establish a County Branch of the Society for the Preservation of Rural England, while the Advisory Panel has rendered assistance to the town-planning authorities of Winchester, Christchurch, Basingstoke and Alton, and of the County Borough of Southampton. The report suggested that the Allied Societies Conference would see the wisdom of an annual meeting of secretaries of all allied societies. A President's badge had been provided during the year. Owing to increased activities a paid assistant secretary, Miss Audrey Smith, had been appointed.

The report was adopted.

Mr. A. C. Townsend, A.R.I.B.A., was the Fellow elected to the Council, and Mr. E. E. Brown was the Associate elected to the Council.

Mr. G. C. Lawrence, P.W.A., F.R.I.B.A., Chairman of the Allied Conference, spoke on registration and other matters of live interest to the association, and subsequently the President and Mrs. Smith held a reception for members and friends, amongst them being the Mayor of Winchester (Councillor Harry Collis).

After tea Mr. G. C. Lawrence gave an address on the history of the R.I.B.A. and the Allied Societies.

NATIONAL PARKS

At the Royal Society of Arts, on Wednesday last, Major-General Sir Fabian Ware presided over a lecture on "National Parks" delivered by Mr. S. K. Ratcliffe.

National parks were American in origin, Mr. Ratcliffe pointed out, dating from the reservation of the Yellowstone region nearly sixty years ago.

In England, he said, the proposal of Lord Bledisloe as to the reservation of the Forest of Dean had started an eager discussion, to which the Prime Minister had responded by the appointment of a departmental committee. There was general agreement as to the tracts of wild unspoilt country which should first be considered as suitable for national domains: Dartmoor, Snowdonia, the English Lakes, the Peak, the Cairngorms, etc. A most essential point would be to secure conditions which would maintain the chosen country in its original state, for the sake of the wild life as well as of quiet. This might mean severe restrictions upon motor traffic, and it would certainly involve a measure of control, as regards building development, over the adjoining land.



Mr. Norman Culley, the New President of the West Yorkshire Society of Architects.

The smallness of our territory and the density of our population made it imperative that a national parks policy should be based upon a right relation to the new activity in regional planning, and in this regard some of the regional committees, such as that of the Lake counties, were moving on the right lines.

The lecture was illustrated with slides, the most interesting of them being examples of the parks and parkways of New York State.

WEST YORKSHIRE SOCIETY OF ARCHITECTS

The annual general meeting of the above Society was held at the Society's rooms in Leeds. Mr. G. H. Foggitt, F.R.I.B.A., the retiring president, presided.

Mr. Norman Culley, F.R.I.B.A., of Huddersfield, the incoming president, presented to Mr. Foggitt, on behalf of the council, an inscribed address expressive of his valuable services to the Society during its last two sessions.

The council's report for the last session was submitted to the meeting and approved. The report showed an increase of members, the total now being 319.

THREE COUNTIES ASSOCIATION'S ELECTION OF OFFICERS

At the annual meeting of the Berks, Bucks and Oxon Architectural Association, held at Abingdon, the following officers were elected: President, Mr. H. Hutt (Berks); vice-presidents, Messrs. T. T. Cumming (Berks), E. A. L. Martyn (Bucks), and T. L. Dale (Oxon); hon. secretary, Mr. E. Steward Smith (Reading); hon. treasurer, Mr. T. T. Cumming; hon. auditor, Mr. C. B. Willcocks (Berks); members of the Council, Messrs. J. T. Saunders, J. R. Greenaway, A. Saxon Snell, W. R. Morris, A. B. West, F. E. Wapshott, W. J. Freeman, and S. E. Burrett (Berks), C. S. Kimpton, H. J. Stribling and W. D. Hartley (Bucks), H. W. Smith, G. L. Taylor, and T. Rayson (Oxon).

LEICESTER AND LEICESTERSHIRE SOCIETY OF ARCHITECTS

At the fifty-seventh annual general meeting of the above Society, the hon. secretary reported that the membership of the Society now numbered 151, an increase of seven over last year's total.

The following members were elected to serve for the ensuing year:

President, Mr. Walter Brand, A.R.I.B.A.; ex-president, Mr. Albert Herbert, F.R.I.B.A.; hon. treasurer, Mr. A. F. Bryan, A.R.I.B.A.; hon. secretary, Mr. C. F. McL. Keay. Council: Full members, Messrs. E. T. Allcock, F.R.I.B.A., W. Keay, F.R.I.B.A., W. K. Bedingfield, F.R.I.B.A., T. T. Sawday, A.R.I.B.A.; associate members, Messrs. W. Cartwright, A.R.I.B.A., and A. E. Smith, A.R.I.B.A.

NEW PRESIDENT OF THE R.I.A.S.

At the last monthly meeting of the Council of the Royal Incorporation of Architects in Scotland, held at Edinburgh, Mr. John Watson, A.R.S.A., F.R.I.B.A., of Glasgow, was nominated as president for the ensuing year.

The following were elected as Associates: Messrs. Ian H. M'Laren (Cults); R. H. Morrison, W. W. C. Shewan, and E. F. Davies (Aberdeen); and W. L. Taylor (Huntly).

STREET TRAFFIC SIGNALS

At a meeting of the Illuminating Engineering Society, held at the Royal Society of Arts on Tuesday of last week, Mr. T. Austin read a paper on "Luminous Traffic Signals."

Mr. Austin, referring to automatic or semi-automatic signals, pointed out

that the adoption of these signals was a practical proposition, and took as an example the fact that automatic signals had been in successful use for several years in many towns of the United States and Canada, and also in Germany, South Africa and other countries.

One of the reasons in favour of automatic signals, he said, was the economic aspect.

The Architects' Journal Prize

The annual competition for THE ARCHITECTS' JOURNAL measured drawing prize, open to students at the Liverpool School of Architecture, has been won by Mr. A. G. Martinez, a second-year degree student, for his drawing of the front of Sir Christopher Wren's Chapel of Emanuel College, Cambridge.

OBITUARY

CHARLES T. MILES : 1852–1930

We regret to record the death of Mr. Charles Thomas Miles, F.R.I.B.A., at seventy-eight years of age.

He was one of the oldest practising architects in Bournemouth, and was joint architect with John Aldridge Scott of St. John's Church, Boscombe, and architect of All Saints' Church, West Southbourne, St. Andrew's, Boscombe, and the libraries at Winton and Boscombe.

His son, Mr. S. C. Miles, who joined him in business thirty-seven years ago, will continue to carry on the practice.

DANE SINCLAIR : 1852–1930

We regret to record the death at Weybridge of Mr. Dane Sinclair. Born at Caithness in 1852, he started his electrical career in 1872 in the telegraph department of the North British Railway. After spending five years in Japan he was appointed engineer to the National Telephone Company for the Glasgow district, and after the amalgamation of the three principal telephone companies became London manager of the new National Telephone Company. He became general manager of British Insulated and Helsby Cables, Ltd., in 1902; a director of the company in 1923, and chairman in 1927. He retained the positions of chairman and managing director until 1928, when, in view of his many years of strenuous work, he relinquished the duties of managing director to Mr. G. H. Nisbett. He was instrumental in promoting the use of the Strowger automatic telephone system, now in extensive use throughout the world, and was the inventor of many devices and methods in general use today. He leaves a widow, four daughters and a son, Mr. D. Johnstone Sinclair, who is a director of British Insulated Cables, Ltd.

COMPETITION CALENDAR

May 16.—Messrs. Ewart and Son, Ltd., in conjunction with the Association of Architects, Surveyors and Technical Assistants, invite designs for a lock-up hangar for an aeroplane. The competition is divided into two classes, for those over and under 25 years of age at midnight, May 15–16, 1930. Assessors : William H. Hamlyn, A.R.I.B.A., and Chas. McLachlan, A.R.I.B.A., with A. N. Cathcart as technical adviser with regard to roofing, ventilation and hot-water supply. Two prizes will be awarded in each class, namely, free places in the A.A.S.T.A. party to Madrid in September, including second-class rail and steamboat travel throughout and all hotel expenses, except personal expenses. Messrs. Ewart and Son, Ltd., reserve the right to publish or make use of any of the designs for which a prize is awarded, but do not reserve the right to build in accordance with any of them. Particulars of the competition, etc., are obtainable from A. Seymour Reeves, Secretary, A.A.S.T.A., 26 Buckingham Gate, S.W.1. Latest date for submission of designs : May 16, 1930.

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs : June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor : J. Ernest Franck, F.R.I.B.A. Premiums : £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs : June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor : Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor : H. V. Ashley, F.R.I.B.A. Premiums : £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs : July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall, which is to be built on the site of the old town hall at an approximate cost of £250,000. Assessor : Sir Brumwell Thomas. Premiums : £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs : July 31.

July 31.—The Dudley Education Authority invites architects having an office within a radius of fifteen miles of Dudley to submit competitiv designs for a Council school to accommodate 320 children, to be erected on the Brewery Fields estate; also a school for 400 children on the Priory estate. Assessor : Herbert T. Buckland, F.R.I.B.A. Premiums : £150, £100, and £50. Applications for conditions of the competition, etc., should be made to J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley, by April 30. Deposit £1 1s. Latest date for submission of designs : July 31.

September 1.—The Bangor (Co. Down) Borough Council invites architects or town planners to submit designs in competition for laying out the sea front within the Borough. Assessor : Professor Patrick Abercrombie, F.R.I.B.A. Premiums : £150 and £50 for first and second places, respectively. Copies of the conditions and plans will be forwarded on application to J. Milliken, Town Clerk, Borough Council Offices, Bangor, Co. Down. Deposit £1 1s. Latest date for submission of designs : September 1.

No date.—The Carlisle Corporation invites British architects to submit designs for the façade to English Street and the Victoria Viaduct, suitable for shops and business premises. The site was previously occupied by the Prison. The total length of the frontage is approximately 358 ft. Assessor : Francis Jones, F.R.I.B.A. Premiums : £300, £200, and £100. Particulars of the competition, etc., may be obtained from Percy Dalton, A.M.INST.C.E., A.R.I.B.A., City Engineer, 18 Fisher Street, Carlisle. Deposit, £1 1s.

No date.—The General Syndicate, Ltd., invites architects to submit competitive schemes for the development of a site at Liverpool, fronting St. John's Lane, Queen Square and Rose Street. Premiums : £250, £100 and £50, for first, second and third prizes, respectively. Particulars, etc., are obtainable on application to the Secretary, the General Building Syndicate, Ltd., 36 St. Martin's Lane, W.C.2.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated, readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

12400. Allen, J. W. Devices for attaching slates, etc., to buildings. April 22.

12860. Bauer, B. Reinforcement of concrete columns. April 25.

12813. Hughes, C. M. C., and Rubberphalte, Ltd. Materials for construction of roofs, etc. April 25.

12922. Ness, G. Fireproof floor construction. April 26.

SPECIFICATIONS PUBLISHED

327950. Pia, C., and Polini, G. Flooring.

304199. Gartenmann, C., and Ringold, K. (trading as Gartenmann et Cie, C.). Method of and apparatus for the production of flooring and paving.

ABSTRACT PUBLISHED

326266. Cameron, H. G. Slated roofs.

THE BUILDINGS ILLUSTRATED

Following is a list of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :

The Great Barr Colony, near Birmingham (pages 748–753). General contractors, Thos. Lowe and Sons. Sub-contractors : Adamite Co., Ltd., Atlas white Portland cement stucco; Charles Wade & Co., steelwork construction; Haywards, Ltd., pavement lights; W. Freer, Ltd., plumbing; Stourbridge Glazed Brick Co., sanitary fittings; Walker and Worsey, Ltd., locks and ironmongery to cottages; Griffin Foundry, ranges and fireplaces in observation blocks; Gibbs, Ltd., kitchen hoods and glazing over stairs; Mellowes & Co., verandah roof glazing ; James Gibbons, Ltd., locks; Buttermere Green Slate Co., Ltd., slates; Pearson, Ltd., iron balustrading to staircases in nurses' house and matron's and surgeons' blocks; George Prince, Ltd., plastering; Val de Travers Asphalte Co., external flat roofs; Hobart Manufacturing Co., Ltd., some of the kitchen equipment; General Electric Co., Ltd., electric cooking; Jackson Boilers, Ltd., steam kettle; Jackson Electric Stove Co., electric fish-fryer; Moorwood, Ltd., steam ovens, vegetable and porridge boilers and steam hot closet; Brightside Foundry and Engineering Co., kitchen contractors; Jones and Attwood, and Couzens and Akers, heating and hot water services in blocks; Couzens and Akers, central heating and hot water service plant; Wright's Forge and Engineering Co., calorifiers; Kennicott Water Softener Co., Ltd., water softeners.

Martins Bank, Ltd., Bexley Heath (pages 746–747). General contractors, Frederick Smith & Co.

TRADE NOTES

Messrs. Langley, London, Ltd., have issued a catalogue of all the roofing tiles of which they are the sole sellers. These are the Courtrai - du - Nord, Beauvais diamond, Beauvais rib, Gilardoni Marne, Beaucour. Cloister, Priory, Gilardoni Essones, and Marseilles roofing tiles, interlocking improved pantiles, and ridge and hip tiles. In the catalogue are illustrations showing some of the colours in which the tiles are made, and useful particulars concerning their size, weight, the number of tiles required to cover various size roofs, etc. There are also valuable draft specifications on the laying of the various tiles which may readily be incorporated into an architect's specification for the erection of any type of building.

*

Messrs. Allen-Liversidge, Ltd., have declared a dividend on the preference shares at the rate of 6½ per cent. per annum (less tax) for the six months ended April 30, 1930. Warrants will be posted on May 30, 1930. The preference share transfer books will be closed from May 16 to 30, 1930, both days inclusive.

*

An exhibition of Scottish Art, modern Japanese colour - prints, and animal sculpture, is being held at Parson's Galleries, 315-317 Oxford Street, W.1, until May 31. The exhibitors are James Wright, R.S.W., Andrew Gamley, R.S.W., M. Watanabé and Phyllis M. Bone. It will be recalled that Miss Bone executed all the animal sculpture on the Scottish National War Memorial, Edinburgh, for the architect. the late Sir Robert Lorimer.

*

The United Steel Companies, Ltd., realized ten years ago the benefits of large-scale organization of industry, whilst preserving the individuality of grouped productive works. With the various constituent firms which form the group many steel users are already closely in touch, but it is not always realized how much further use can be made of the companies as a group. An interesting booklet has therefore been issued to enable customers to find out something more about the firms, to look at them, as it were, from the inside. It is claimed that the new Templeborough Works, with its fourteen 60-ton furnaces, is a great advance on anything which existed in this country. They have, it is claimed,



Church Hall, Westminster, one of the large number of buildings heated by the Unity electric system and illustrated in Heating and Ventilating by Electricity, *published by Young, Osmond and Young. The book may justifiably be called a standard work on the subject, showing, as it does, the greater uses and benefits of electricity as a means for heating and ventilating. It contains much data of a nature that could rightly be regarded as " trade secrets."*

achieved a record output of over 4,000 tons in a single week, and can turn out 30 tons of strip and 40 tons of bars an hour. It is claimed that the Appleby Works, which only came into operation very recently, is in many ways ahead of American and Continental ideas. The steel-melting shop contains four furnaces of up to 300 tons capacity; they are charged with molten pig transferred direct from the blast furnaces, and the mill can roll plates up to 11 ft. in width and up to 90 ft. in length.

*

"Electro-Vapour" radiators are the subject of a new leaflet, illustrated in colour, just issued by Messrs. Benham and Sons, Ltd. These radiators can be used for complete electric heating schemes for private houses, offices, cinemas, shops, factories, etc. They can also be used for supplementing existing heating systems and as individual units. They are self-contained and are claimed to be economical, fireproof, and absolutely safe; they are also of British manufacture throughout. "Electro-Vapour" radiators are passed by the L.C.C. and other authorities for public buildings, explosives factories, film rooms, petrol stores, and places where extra precautions are necessary. For purposes of economy most sizes are fitted with three-heat control—full, half and quarter heat. The radiators are manufactured in several types, of which there are three standard classes—Plain, Classic and Royal.

*

Messrs. G. A. Harvey & Co. (London), Ltd., have inaugurated a works' magazine, under the title of *The Harco Magazine*. No words could explain its value better than those of Mr. Sydney Harvey, in the foreword to the first issue. He says: "Intensive mechanization is inclined to dehumanize industry, and in an age of machinery we tend to lose sight of the individual man and woman, who, after all, are the principal factors in industry. The old friendly and intimate relations of a firm with every one of its employees are becoming increasingly difficult. Organization and modernization have come between them and formed an ever-widening gulf. Our magazine will help to bridge that gulf, and form a link between our works in London and our offices in the provinces, in Glasgow, Cardiff and Belfast, in the Dominions—Australia, New Zealand and South Africa—in South America and in the Far East. It will bind us together as members of one large family." The first issue contains a wealth of literary and artistic talent. Among the more interesting features is a departmental ditty, "The Song of the Perf. Machine," by "Gnats." The first verse runs:

> Thump! Thud! Thump! Thud! sings the
> Perf. Machine,
> Punching holes in oily sheets,
> Countless holes by countless beats,
> Thump! Thud! Thump! Thud!
> Oblong holes and circled holes,
> Simple holes and patterned holes,
> Thump! Thud! Thump! Thud! sings the
> Perf. Machine.

THE ARCHITECTS' DIARY

WEDNESDAY, MAY 14

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Architects' Drawings of 1800–1850. 10 a.m. till 8 p.m. Saturdays 10 a.m. till 5 p.m. Exhibition closes on May 24. **10 a.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Exhibition of Wall Papers. 10 a.m. till 10 p.m. Until May 17. **10 a.m.**

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition open to the public. **10 a.m.**

ARCHITECTS' BENEVOLENT SOCIETY, 9 Conduit Street, W.1. Annual General Meeting. Sir Banister Fletcher, F.R.I.B.A., will preside. **5 p.m.**

LONDON SOCIETY, Lancaster House. St. James's Street, S.W.1. Annual Dinner at the Hotel Victoria, Northumberland Avenue, W.C.2. The Earl of Crawford and Balcarres will preside. 7.30 for 7.45 p.m. (Tickets 12s. 6d. each.) **7.30 p.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

PARSONS' GALLERIES, 315-317 Oxford Street, W.1. Exhibition of Scottish Art. 10 a.m. to 6 p.m. Until May 31. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art, to be opened by the Archbishop of Canterbury.

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

LONDON UNIVERSITY Presentation Day. Albert Hall. **2.30 p.m.**

THURSDAY, MAY 15

R.I.B.A., 9 Conduit Street, W.1. Annual Dinner to be held at the Guildhall, E.C.

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Special visit to Tilbury Docks. Meet at Superintendent's Office at 3 p.m. Early application to the Secretary for tickets is advisable. **3 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual General Meeting, 6 p.m. Irish Centre (Dublin). At the Physical Laboratory, Trinity College, Dublin. Annual General Meeting, 7.45 p.m. Hampshire Sub-Centre. At Southampton, Summer Meeting. **6 p.m.**

FRIDAY, MAY 16

INSTITUTION OF ELECTRICAL ENGINEERS. Scottish Centre. At the Technical College, Dundee. The twenty-first Kelvin Lecture. "Some Recent Advances in the Electron Theory of Metals." By R. H. Fowler, F.R.S. **7.30 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to Dr. Saleeby's House in Kilburn. Assemble in Booking Hall, Kilburn Park Station (on Bakerloo Tube), at 2.40 p.m. **2.40 p.m.**

SATURDAY, MAY 17

Sunrise, 5.6 a.m. Sunset, 8.47 p.m.

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the Fishmongers' Hall, London Bridge, E.C. **2.30 p.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. London Students' Section. Second visit to the Brookmans Park Regional Station of the British Broadcasting Corporation. **2.30 p.m.**

MONDAY, MAY 19

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. General Meeting. "Architecture of Our Own Times." By Eric Mendelsohn. (Lantern Illustrations.) Exhibition of Architecture of Bloomsbury; also work of Eric Mendelsohn. Until June 14.

WEDNESDAY, MAY 21

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

THURSDAY, MAY 22

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

ARCHITECTURE CLUB. Dinner to Eric Mendelsohn, Savoy Hotel. **7.30 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the First Clubland Church, 54 Camberwell Road, S.E.5. **3 p.m.**

FRIDAY, MAY 23

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

SATURDAY, MAY 24

Sunrise, 4.57 a.m. Sunset, 8.57 p.m.

MONDAY, MAY 26

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Executive Committee. 4 p.m. General Meeting. "Recent Excavations at Ur." By C. Leonard Woolley, M.A., HON.A.R.I.B.A. 8 p.m. **4 p.m.**

TUESDAY, MAY 27

ST. BARTHOLEMEW'S HOSPITAL. A ball, in aid of the Reconstruction Fund, is to be held at the Locarno Dance Hall, 158 Streatham Hill, S.W.2. The price of the tickets are: Gentlemen 10s. Ladies 7s. 6d.

WEDNESDAY, MAY 28

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Father of English Pottery—Josiah Wedgwood, F.R.S., Potter, Inventor and Man of Science." By Harry Barnard. Frank H. Wedgwood will preside. **8 p.m.**

FRIDAY, MAY 30

R.I.B.A., 9 Conduit Street, W.1. Intermediate Examination. Until June 5.

SATURDAY, MAY 31

Sunrise, 4.50 a.m. Sunset 9.5 p.m.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. In connection with the Bicentenary of Josiah Wedgwood, a special exhibition of Wedgwood ware will be opened in Room 136. **10 a.m.**

MONDAY, JUNE 2

INSTITUTION OF ELECTRICAL ENGINEERS. Summer Meeting at the Irish Centre. June 2–6, inclusive. Assemble in the evening at the Gresham Hotel, Dublin.

TUESDAY, JUNE 3

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. Annual Meeting. **7 p.m.**

GARDEN CITIES AND TOWN PLANNING ASSOCIATION, 3 Gray's Inn Place, W.C.1. Whitsun Housing and Town Planning Tour. June 3–14 inclusive. Visit to Northern Capitals of Europe. Full particulars on application to the Secretary of the Association.

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Motor trip in Co. Wicklow, including inspection of overhead transmission lines. Lunch and tea at Glendalough.

WEDNESDAY, JUNE 4

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Proceed by special train to Limerick for visit to the Shannon Scheme.

THURSDAY, JUNE 5

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Visit to the brewery of Messrs. A. Guinness, Sons & Co. Lunch by invitation of the Company. Afternoon: Leave Dublin by special train for Belfast. Evening: Reception by the Lord Mayor of Belfast, Rt. Hon. Sir William Coates, at the City Hall.

SATURDAY, JUNE 7

Sunrise, 4.45 a.m. Sunset, 9.12 p.m.

WHIT MONDAY, JUNE 9

THURSDAY, JUNE 12

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual Conversazione, to be held at the Natural History Museum, South Kensington, S.W.

SATURDAY, JUNE 14

Sunrise, 4.43 a.m. Sunset, 9.18 p.m.

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND. Gloucestershire Branch. At the Town Hall, Cheltenham. Conference under the chairmanship of Major-General Sir Fabian Ware, K.C.V.O., K.B.E. 11 a.m. Opening address by the Mayor of Cheltenham, followed by "Regional and Town Planning," by Captain J. H. Trye, C.B.E., R.N. Discussion on the subject to be opened by G. L. Pepler. 12.45 p.m.: Lunch. Afternoon Session, 2 p.m.–4 p.m.: "The Traditional Building of the Cotswold and surrounding Stone Districts." By H. Stratton Davis, F.R.I.B.A.; and "Modern Building and the Use of New Materials," by Thomas Falconer, F.R.I.B.A., followed by discussions to be opened by Sir Philip Stott, Bart., and J. W. Robertson Scott, respectively. **11 a.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Annual General Meeting and Annual Dinner. Particulars will be announced later.

MONDAY, JUNE 16

R.I.B.A., 9 Conduit Street, W.1. Election of Council and Standing Committees: Election of Members. **8 p.m.**

WEDNESDAY, JUNE 18

R.I.B.A., 9 Conduit Street, W.1. British Architects' Conference, to be held at Norwich. Until June 21 inclusive.

FRIDAY, JUNE 20

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. At the Royal Society of Arts, John Street, Adelphi, W.C.2. Provisional date for a lecture on "Beautification of our Arterial Roads." By Thomas C. Adams.

SATURDAY, JUNE 21

Sunrise, 4.42 a.m. Sunset, 9.21 p.m.

ROYAL SANITARY INSTITUTE. Annual Congress to be held at Margate until June 28 inclusive. Various lectures, discussions and visits will be held throughout the week. **12 noon.**

WEDNESDAY, JUNE 25

ROYAL SANITARY INSTITUTE. At Margate. Meetings of the Architectural and Engineering Sections. **10 a.m.**

FRIDAY, JUNE 27

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL SOCIETY, The Castle, Winchester. Excursion to the Joinery Works of Messrs. W. E. Chivers and Sons, Ltd., Devizes, and buildings of architectural interest in the neighbourhood. A General Meeting will be held after lunch.

SATURDAY, JUNE 28

Sunrise, 4.45 a.m. Sunset, 9.21 p.m.

WEDNESDAY, JULY 2

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION. Annual Exhibition to be held at Portsmouth until July 8.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

Plans passed by the CAMBERWELL B.C.: Two shops, Upland Road, for Mr. W. R. Stacey; two shops, rear of Queen's Road, for Mr. H. W. Cash; additions to Convent of the Sacred Heart, Honor Oak Park, for Mr. T. Stott; rebuilding, 83 Old Church Road, Addington Square, for Messrs. Watney, Combe, Reid & Co., Ltd.

H.M. Office of Works is to erect a telephone exchange in Bromley Road, CATFORD.

The CROYDON Corporation is considering a proposal for the erection of children's wards at the Poor Law Hospital in Mayday Road.

The ILFORD Corporation is purchasing eleven acres of land at Tomswood Road, for a housing scheme.

The ILFORD Corporation is to consider a revised scheme for extensions at the maternity home.

The ILFORD Corporation recommends a site in the vicinity of Hamilton Road, for the erection of a branch library.

The KENSINGTON B.C. is to acquire an old Church Army institution in Penzance Street, for converting into flats.

Messrs. Kirk and Kirk, Ltd., are to carry out alterations at the King's Hall Cinema, High Road, LEWISHAM.

Plans passed by LEWISHAM B.C.: Additions, "Tiger's Head" public-house, Bromley Road, for Mr. A. R. Mayston; building, near Catford Bridge, for Mr. F. M. Kirby; twenty-two houses, Newquay Road, for Mr. T. A. Boughton; ten houses, Baring Road, for Messrs. W. J. Scudamore, Ltd.; two houses, Montem Road, for Messrs. H. and D. Winn; five houses, Le May Avenue, for Mr. Chas. Durbin; parish hall, Shrofield Street, for Merton Abbey Joinery Works.

The General Hydraulic Power Co., has recently demolished property in Hatfield Street, SOUTHWARK, and purchased adjoining land from the enlargement of the company's yard, in accordance with plans prepared by Mr. A. R. Conder, architect.

Mr. N. Hart is to erect a cinema upon a site at the corner of Sydenham Road and Girton Street, SYDENHAM.

EASTERN COUNTIES

The Herts Education Committee has purchased a site at BALDOCK, for the erection of an elementary school.

The Herts Education Committee has purchased a site in Littlegrove Road, BARNET, for the erection of a secondary school.

The CHELMSFORD Corporation has approved the plans of the borough engineer, for the layout of Oaklands Park.

The COLCHESTER Education Committee has decided to erect an elementary school in Mersea Street.

The COLCHESTER Corporation has arranged upon the building line in connection with a new cinema to be erected in Crough Road, from the design of Mr. Cecil Masey, A.R.I.B.A.

Plans passed by the COLCHESTER Corporation: House, King Harold Road, for Mr. C. W. Fisher; four houses, Park Farm, Greenstead Hall Chase, for Mr. S. A. James; pavilion, Castle Park, for Messrs. Duncan Clark and Beckett; alterations, East Mills, for Messrs. Brown and Burgess; three shops, London Road, Lexden, for Mr. A. T. Clarke; shop, Old Heath, for Mr. C. Rowe; workshop, Ipswich Road, for Mr. S. A. James; additions to showroom, Head Street, for Messrs. H. L. Griffin & Co., Ltd.; house, Clay Lane, Parson's Heath, for Mr. T. J. Smith.

The Herts Education Committee has purchased a site at CROXLEY, for the erection of an elementary school.

The Herts county surveyor has prepared plans for adapting the old Grammar School at HERTFORD as an elementary school, at a cost of £3,000.

The Herts Education Committee has purchased a site at Mill Hill, RICKMANSWORTH, for the erection of a senior school.

The Herts Education Committee has obtained a site at WELWYN Garden City, for the erection of a junior school, and is to obtain land for the erection of a senior school.

SOUTHERN COUNTIES

Plans passed by the EASTBOURNE Corporation: Alterations and additions, 9 Grassington Road, three houses, Torfield Road, and alterations forming new National Provincial Bank, 265 Seaside, for Messrs. P. D. Stonham and Son (architects); four houses, Brodrick Road, Hampden Park, for Messrs. A. and W. Kennett; local office, Brassey Avenue, Hampden Park, for Messrs. Scales and Baker (architects), on behalf of Messrs. Rickett, Smith & Co.; house, Eldon Road, for Mr. A. Ford (architect); four houses, Dillingburgh Road, for Mr. A. J. Fellows (architect); alterations, 66 Seaside, for Mr. A. Ford (architect).

At a meeting of the EASTBOURNE Corporation Parks Committee the borough surveyor submitted a plan for the provision of a boating lake at Gilbert recreation ground at an estimated cost of £5,433, and also details of proposed excavation work in connection with the housing scheme on the Crumbles land. It was decided to refer the matters to a sub-committee for consideration and report.

The HASTINGS Corporation is to erect an electricity sub-station in Virgin Street, Battle.

Plans passed by the HASTINGS Corporation: Ten houses, Bexhill Road, St. Leonards; for Messrs. Ward, Son and Wray (architects); house, Burry Terrace, St. Leonards, for Mr. V. A. Whittle (architect); four houses, Downs Road, for Messrs. J. Lester and Son; house, Edmund Road, for Mr. J. E. Maynard (architect); house, Albany Road, St. Leonards, for Mr. H. Burleigh (architect); two cottages, Red Lake, Ore, for Mr. H. W. Coussens (architect).

Mr. F. Betts is to develop the Oaklands estate at KENLEY, Surrey.

The OXFORD Corporation has approved plans, submitted by Mr. J. R. Wilkins, for the erection of an ice skating rink in Botley Street.

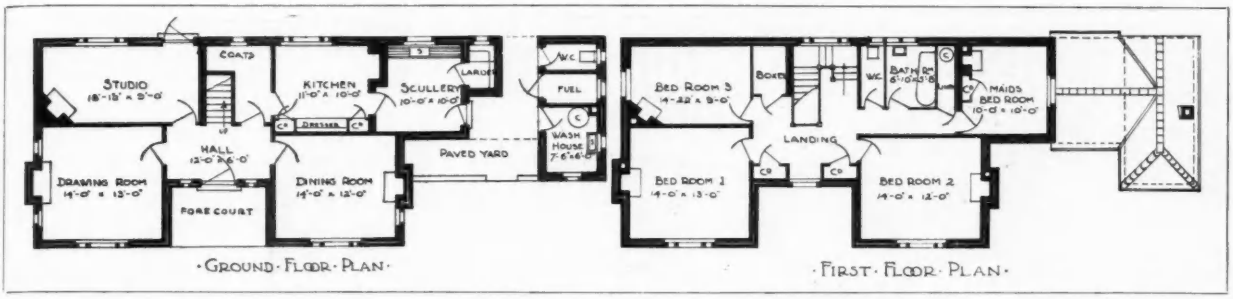
Plans passed by the OXFORD Corporation: Workshops and stores, rear of Walton Road, for Messrs. W. Lucy & Co.; store, rear of Garsington Road, for Morris Motors; conversion of St. Thomas's House into six flats, Paradise Street, for Messrs. Weeks & Co.; two houses, Quarry Road, for Messrs. F. and A. Watson; house, Sandfield Road, for Manor Estate Co.; rebuilding, "Royal Standard" public-house, High Road, Headington, for Morrell's Trustees; two houses, Ashgrove Avenue, Headington, for Mr. H. W. Jacobs; two houses, Stephen Road, Headington, for Mrs. E. Butler; laboratory, New College School, Savile Road, for Messrs. Hinkins and Frewin; twenty-eight houses, Cemetery Street, Cowley, for Mr. A. J. Colbourne.

SOUTH-WESTERN COUNTIES

Plans passed at POOLE: Two dwelling-houses and one garage, Mayfield Avenue, for Mr. H. Ventress; five dwelling-houses, Pottery Road, for Mr. J. Jagger; dwelling-house, Blandford Road, for Mr. E. Houlton; dwelling-house and garage, Mornish Road, alterations and additions to dwelling-house, "Looe Cottage," Banks Road, and dwelling-house and garage, Banks Road, for Mr. E. de Wilde Holding; dwelling-house, Rosemary Road, and two dwelling-houses, Gorse Hill Road, for Messrs. Corbin and Clark; dwelling-house, Sunnyside Road, for Mr. P. J. Pooss; dwelling-house, Brudenell Avenue, for Mr. L. Moore; dwelling-house, Canford Cliffs Road, for Mr. E. de Wilde Holding; extension to garages, West Quay Road, for the Anglo-American Oil Co., Ltd.; conversion of dwelling-house into shop, 151 Ashley Road, for Mr. E. de Wilde Holding; dwelling-house, Ringwood Road, for Mr. H. J. Rogers; pair semi-detached dwelling-houses and one dwelling-house, Dorchester Road, for Mr. C. R. Symonds; dwelling-house and garage, corner Elmstead and Newton Roads, for Mr. T. F. Ingram; alterations and additions, 130 High Street, for Mr. H. J. Vick; two dwelling-houses, Haskells Road, for Mr. H. Ventress; four dwelling-houses, Gloucester Road, for Messrs. Philpotts and Manners; dwelling-house and garage, Salter Road, for Messrs. Rumsby and Rodd, for Miss Page-Wilson; dwelling-house, Canford Cliffs Road, for Mr. E. F. Knight; dwelling-house, Harbour Hill Road, for Mr. F. W. Spratley; dwelling-house, Woodlands Avenue, for Messrs. Bartlett and Whiffen; dwelling-house and shop, Ringwood Road, for Mr. F. E. Warry; garage, Pinewood Road, for Messrs. Jackson and Greenen; pair semi-detached dwelling-houses, Stanley Green Road, for Mr. E. de Wilde Holding; dwelling-house, Mayfield Avenue, for Messrs. Philpotts and Manners; dwelling-house, off Links Road, for Messrs. Seal and Hardy; dwelling-house, Martello Park Road, for Mr. J. Allner; pair semi-detached dwelling-houses, Sunnyside Road, for Miss M. Best; dwelling-house, Whitefield Road, for Messrs. Watton Bros.; dwelling-house and garage, Hatherden Avenue, for Mr. R. B. Padmore; pair semi-detached dwelling-houses, Gorse Hill Crescent, for Messrs. Corbin and Clark; pair semi-detached dwelling-houses, Enfield Road, for Messrs. L. J. Newell and Sons; dwelling-house, Twemlow Avenue, for Mr. C. J. Barfoot; dwelling-house and shop, corner Gloucester and Binnie Roads, for Messrs. Philpotts and Manners;



House at Gregynog, near Newtown, Montgomery. Designed by T. Alwyn Lloyd. The main front (left) and the garden side (right). The walls are of 11-in. brickwork, cement roughcasted and colour washed; and wood casement windows are fitted. The roof is covered with North Wales green slates, with chimney-stacks of Goitre rough facing bricks. *For ground- and first-floor plans, see page 771.*



House at Gregynog, near Newtown, Montgomery. Designed by T. Alwyn Lloyd. Ground- and first-floor plans. The entrance hall gives on to the drawing-room, studio, dining-room and "coats." The "coats" adjoins the staircase, and gives access to the kitchen quarters. The floors of the hall and reception rooms are of 1¼-in. pitch-pine blocks, the kitchen and sculleries being tiled. On the upper floor are four bedrooms, bathroom and boxroom.

dwelling-house, Harbour Hill Road, for Mr. J. Jagger; dwelling-house and garage, corner Island Road and Twemlow Avenue, and dwelling-house, Island Road, for Mr. Colin R. Maggs; dwelling-house, Sandbanks Road, for Messrs. Baker, Son and Baker; factory, rear of Morrison Avenue, for Mr. F. G. Nutt; dwelling-house, Canford Cliffs Road, for Mr. N. G. Shears; dwelling-house, Gordon Road, for Mr. R. E. Taylor; dwelling-house, Brudenell Avenue, for Mr. W. B. Chinchen; dwelling-house and garage, Elms Avenue, for Mr. R. J. Bishop; dwelling-house, Ringwood Road, for Mr. H. Ventress; pair semi-detached dwelling-houses, off Coles Avenue, for Messrs. Stokes and Whittle; offices and workrooms, Upton Road, for Mr. F. G. Pearcy; three dwelling-houses, Lincoln Road, for Mr. D. Thomas; two dwelling-houses, Churchfield Road, for Mr. C. J. Barfoot.

Plans passed by the TORQUAY Corporation: House, St. Katherine's estate, for Mr. R. E. Narracott; alterations, Shedden Hall Hotel, Shedden Road, for Mr. W. R. Cutchey; alterations, 21 Victoria Parade, for Mr. E. D. Cox; alterations and additions to shop, St. Anne's Road, Babbacombe, for Mrs. A. Ford; conversion into flats, "High View," Avenue Road, for Messrs. Peeke Bros.; bungalow, Manscombe Road, Livermead, for Mr. J. F. Lancaster; bungalow, Lower Audley Road, for Mr. C. Stevens; house, Ilsham Marine Drive, for Miss E. C. Baker; house, Manscombe Road, Livermead, for Mr. A. B. Frame; bungalow, Shiphay Lane, for Mrs. M. I. Wooler; layout, Shiphay Manor estate, for Messrs. Easterbrook and Gilley; bungalow, Barton Road, for Mr. A. Powell; bank premises, Fore Street, St. Marychurch, for Barclays Bank, Ltd.

MIDLAND COUNTIES

The NORTHAMPTON Education Committee has obtained a site in Kettering Street, for the erection of an elementary school.

The NORTHAMPTON Electric Light and Power Co., Ltd., is to erect an electricity sub-station in Birchfield Road.

The WALSALL Corporation is to adapt premises in Bridge Street as electricity offices and showrooms, at a cost of £7,800.

The WALSALL Education Committee has selected a site in Darwell Road, for the erection of a technical college.

NORTHERN COUNTIES

The BIRKENHEAD Catholic authorities have forwarded to the Board of Education plans for the erection of a Catholic elementary school in Challis Avenue.

The Board of Education has approved the sketch plans of the BIRKENHEAD Education Committee for the erection of a central school at Tollemache Street, and the Committee has instructed the architect to prepare complete plans so that tenders may be invited.

The BOLTON Corporation Housing Committee is considering the layout of Hall-in-the-Wood estate, providing for the erection of 550 houses and 10 shops.

Plans passed by the BOLTON Corporation: Six houses, Sharples Avenue, for Messrs. A. H. Price and Groves; streets, off Sharples Avenue, for the executors of Sir John Holden; stores, Green Lane, for Bolton Cricket Club; two houses, off New Church Road, for Messrs. T. P. Smith, Ltd.; two houses, Wilmot Street, for Mr. H. Craig; house, New Church Road, for Mr. J. H. Sharples; streets, Marshdale Road, off Markland Hill Lane, for Lady Beaumont; house, Marshdale Road, for Mr. J. Whittingham; two houses, Old Kiln Lane, for Mr. W. Varley; seventeen houses, Chorley Old Road, Doffcocker estate, for Mr. S. Main; seven houses, New York Road, for Messrs. Dobson and Tierney; extensions to shop, 122 Blackburn Road, for Mr. Thomas Relph; alterations, 110 Bury Old Road, for Mr. James Shuttleworth; transformer sub-station, back Green Lane, for the Electricity Committee; house, Regent Road, for Mr. J. Latham; house, Barrow Bridge Road, for Mr. J. Cecil Lomax; four houses, Plodder Lane, for Mr. W. Reddyhough; six houses, Duchy Street, for Mr. Ernest Howarth; two houses, St. Helens Road, for Mr. R. Stott; nine houses, Bromwich Street, for Mr. James E. Paiton; streets, Woodbine Road, for Sir W. R. Hulton, Bart.

The CHESTERFIELD Corporation has asked Messrs. Jackson and Fryer, to prepare plans for fifty houses to be erected on the Newbridge estate.

The CHESTERFIELD Education Committee is purchasing land for the extension of the Derby Road elementary school.

The Board of Education Committee has approved the plans of the CHESTERFIELD Education Committee, for extensions at the central school.

Plans passed by the CHESTERFIELD Corporation: Additions to new cellulose department, Walton Works, for Messrs. Robinson and Sons, Ltd.; alterations, Red Lion Inn, Whittington Moor, for Messrs. Duncan Gilmour and Co., Ltd.; two houses, Newland Pond Road, for Messrs. Collis and Sons, Ltd.; alterations to Falcon Café, Low Pavement, for Mr. J. Boden; additions to mixed junior school, Jawbones Hill, for the Education Committee; two houses, Cutthorpe Road, for Mr. A. E. Needham; Adult school hall, Storforth Lane, for the trustees of the Hasland Adult school; alterations to schools at Brushes and Whittington, for the Education Committee; two houses, Fidler's Corner, for Mr. A. E. Needham; extensions, St. James's Mission, Vicar Lane, for the Churchwardens of St. Mary and All Saints Church; alterations to premises, Knifesmith Gate and Packers' Row, for Messrs. Swallow and Sons, Ltd.; shops and showrooms, Packers' Row, for Mr. E. Lotery; additions to Church Street infants' school and the girls' school, for the Education Committee; amended plan of shops, Vicar Lane, for Mr. A. Swale; two houses, Rhodes Avenue, for Mr. A. Needham; alterations and extensions, Packers' Row, for Messrs. J. K. Swallow and Sons, Ltd.; two houses, Derby Road, for Mr. F. Beardow.

The Durham County Education Committee has purchased a site at CROOK, for the erection of an elementary school.

The Durham County Education Committee is to erect an elementary school at EAST RAINTON, with accommodation for 300 pupils.

The Durham County Education Committee has decided upon the erection of an elementary school for 400 pupils at EDEN CASTLE, at an estimated cost of £11,000.

Plans passed by the ILKESTON Corporation: Two houses, Corporation Road, for Messrs. D. Roberts and Son; bungalow, Heanor Road, for Mr. G. V. Pattinson; special subject school, Bennerley Avenue, for the Education Committee.

The LEEDS Corporation has approved the scheme of the city engineer for the erection of eighty houses and twenty cottage flats on the York Road and Selby Road estate, and decided to undertake the work, by direct labour, at an estimated cost of £34,370.

The LEEDS Corporation Improvements Committee is in communication with Mr. Samuel Scott with respect to the proposed erection of a cinema in The Headrow.

The LEEDS Corporation has sold land in New Briggate and The Headrow to the Shaftesbury Trust, Ltd., for £110,000, subject to the buildings conforming to designs to be approved by Sir Reginald Blomfield.

The LEEDS Corporation has asked Messrs. Bowman and Son, architects, to obtain tenders for adapting premises in South Street, as offices for the Assessment Committee.

The LEEDS Corporation has approved a scheme for widening the bridge over Wyke beck at Selby Road.

The LEEDS Corporation has considered a scheme for the extension of the Meanwood Mental Colony, and decided to carry out the first portion of the scheme, comprising the erection of three adult blocks, two children's blocks, low-grade block, school and entrance lodge.

The MANCHESTER Corporation has passed plans for the erection of the new Wilbraham Road branch library.

The MANCHESTER Education Committee has approved plans for alterations and additions at the Birley Street municipal school.

The MANCHESTER Education Committee has approved plans for the erection of a senior mixed department at the Gorton Mount municipal school.

The MANCHESTER Education Committee has approved plans for the erection of a new building to provide a school for junior mixed and infants, to replace the temporary premises of Collyhurst municipal school.

The Leeds Education Committee is to erect a temporary elementary school in King Road, MOORTOWN.

The NEWCASTLE Education Committee is to erect an elementary school for 1,400 children in Wharrier Road.

The OLDHAM Corporation has referred the question of erecting additional houses which could be let at rentals within the means of the working classes to a sub-committee for consideration.

Plans passed by the OSSETT Corporation: New street and forty-two houses, Spa Street, for Mr. J. Illingworth; warehouse, Runtlings, for Mr. D. H. Archer.

The SALFORD Corporation is being asked to prepare a scheme for the construction of slipper baths and washhouses in Clarence Street, Broughton.

The SALFORD Corporation is to borrow £15,150 for reconstruction of the drains and alley surfaces and repair of the pen surfaces of a portion of the cattle market, required for the sale of livestock.

Plans passed by the SHEFFIELD Corporation: Two houses, Kingfield Road, for Messrs. Dyson and Morgan; four houses, Whirlowdale Crescent, for Mr. W. W. Plant; two houses, Whirlow Court Road, for Mr. W. C. Mander; two houses, Canterbury Crescent, for Mr. J. W. Sivil; four houses, Gisborne Road, for Messrs. Wm. Malthouse, Ltd.; three houses, Dalewood Avenue and Folds Lane, for Messrs. Bingham and Worthington; two houses, Montrose Road, for Mr. J. E. Marchinton; six houses, Haugh Lane, for Mr. C. M. Taylor; two houses, Abbey Crescent, for Mr. J. V. Auckland; two houses and six garages, Garry and Upwood Roads, for Mr. M. Simpson; 226 houses, Shiregreen estate, for the Sheffield Corporation; two houses, Whirlowdale Road, for Mr. C. H. Leadbeater; four houses, Haugh Lane, for Mr. G. M. Taylor; six houses, Halesworth Road, for Mr. J. R. Cambe; two houses, Shirlow Grove, for Mr. E. Walker; two houses, Richmond Road, for Mr. V. L. Ward; six houses, Dalmore Road, for Messrs. Plant Bros.; two houses, Abbey Lane, for Mr. J. Harold Stevens; two houses, Hoober Road, for Mr. W. Green; house, Queen Mary Road, Stand House School, for the Education Committee; school and house, Crowder Avenue, for the Education Committee.

Plans passed by the SHIPLEY U.D.C.: Alterations to shop, Commercial Street, for Thrift Stores, Ltd.; alterations and additions, Commercial Street, for Mr. W. Rimmington; extension to stone sawing shed, Bolton Hall Road, for Messrs. Waterhouse, Denbigh & Co., Ltd.; three houses and shops, Leeds Road, for Messrs. Mellor and Booth; eleven houses, Aireville Avenue, for Mr. J. Chippindale; layout, Nab Wood estate, for Messrs. Wm. Pitts and Sons.

The STRETFORD U.D.C. has approved plans submitted by the surveyor, for the construction of a canal bridge at Moss Road, at an estimated cost of £12,000.

THE PUBLISHER'S PAGE

MR. AUMONIER'S book on *Modern Architectural Sculpture* will shortly be seeing the light of day. It will be going to press about the 20th of this month. Readers, therefore, who wish to order the book at the special subscription price of £2 15s. and to have their names printed in the list of subscribers which will appear in the book, should send in their names at once to the publishers,



William Aumonier, author of Modern Architectural Sculpture, *shortly to be published by the Architectural Press.*

the Architectural Press. The book will contain nearly five hundred illustrations of the best work which has been executed during the last few years throughout Europe and America, much of which has not hitherto been illustrated. The list of sculptors whose work is represented in the book will contain about 120 names, and while some of these, such as Meštrović, Maillol, Bourdelle, Milles, etc., are household words, others of them are as yet almost unknown except in their own countries. The use of the word "modern" in the title should not be understood as implying that the book contains the work of the modernists only, for it has been Mr. Aumonier's aim to include in it the whole range of architectural sculpture of every type. The announcement of the book has created enormous interest all over the world, and orders for it have been received from almost every conceivable country.

MR. H. B. CRESWELL, the author of *The Honeywood File*, has always had the reputation of being a most uncompromising opponent of advertising and advertisers in any shape or form. It is, therefore, a rather delightful accident that *The Advertising News*, in its review of *The Honeywood File*, should refer to it as "a model of chaste, refined, and yet wellnigh perfect advertisement of a profession." Whether Mr. Creswell will be pleased or hurt by this suggestion, the fact remains that it is well deserved. The work of educating the public to the value of the architect's services is one that cries out to be done. Mr. Creswell's book is helping along the good work in a subtle and indirect way, and the more architects can do to spread its sale among laymen and among their clients, the more they will benefit the cause of the architect.

By the way, the Editor, I hear, will shortly have an announcement to make concerning some further doings at Honeywood.

IT is interesting to note that while many appreciative letters have been received from architectural associations up and down the country regarding the free advertisement scheme for architectural assistants, the Hampshire and Isle of Wight Architectural Association have gone a step farther and circularized their members in the following manner:

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION

The Castle,
Winchester,
May 3, 1930.

Important.

DEAR SIR,

Free Advertisements for Architectural Assistants

On and after May 1, 1930, notices from architects requiring assistants, and from assistants seeking positions in architects' offices, will be printed in THE ARCHITECTS' JOURNAL free of charge.

Notices should be addressed to the Advertisement Manager, THE ARCHITECTS' JOURNAL, 9 Queen Anne's Gate, S.W.1, and should reach there by first post on Saturday morning for inclusion in the following week's paper.

The above information appears on page xxxviii of THE ARCHITECTS' JOURNAL for April 16, 1930.

Members are advised to read the article upon this subject on page 597 of the same issue, and to show their appreciation by making full use in the future of this most generous and valuable help offered by THE ARCHITECTS' JOURNAL.

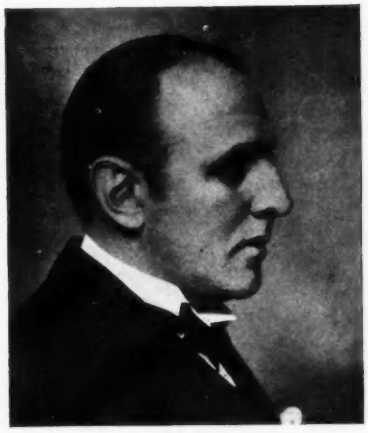
Yours faithfully,
A. L. ROBERTS,
Hon. Secretary.

Active support such as this calls for warm commendation, and it is only hoped that for the success of the scheme other associations will see their way clear to follow the same example.

LAST week there appeared in our correspondence columns a letter from the Association of Architects, Surveyors and Technical Assistants, also commending this new policy of ours. In this connection we should like to draw our readers' attention to the work that is already being done by this Association towards solving the economic problems, not only of architects' and surveyors' assistants, but of all salaried men; problems which the A.A.S.T.A. has discovered affect not only the section with which they are directly concerned, but the whole profession, and which can only be solved by that co-operation which has been the object of their endeavours for the past ten years.

The Association has a Benefit Fund for Sickness and Unemployment; a Benevolent Fund and an Employment Bureau for the use of its members.

Upon the problems arising from its activities the Association has at various times made representations to the R.I.B.A. Council with convincing results. Under this head its outstanding items are the "Outline Course of Study for the Guidance of Architects who accept Pupils in districts where Professional School Education is not available" (issued by the R.I.B.A.



William H. Hamlyn, A.R.I.B.A., President of the A.A.S.T.A., and Hon. Secretary, R.I.B.A. Salaried Members Committee.

Council in 1926), and the Salaried Members Committee R.I.B.A., which was set up two years ago, following a memorandum from the Association of Architects, Surveyors and Technical Assistants, when the policy suggested by the Association was in the substantial sense adopted by the R.I.B.A. Council.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_3	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_3	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_3	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_3	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_3	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_3	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_3	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_3	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_3	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_3	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_3	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_3	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle ..	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_3	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_3	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_3	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

*** In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.**

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
IF left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 1 17 6
DO. 6-2-1, per yd. cube 1 12 6
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 14 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 6
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.		5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

	Med. Grey			Med. Green		
Portmadoc Ladies				£14	0	0
Countess				23	0	0
Duchess				32	10	0
Old Delabole	*Med. Grey*			*Med. Green*		
24 in. × 12 in.	£42	11	3	£45	1	0
20 in. × 10 in.	31	4	3	33	0	6
16 in. × 10 in.	20	18	0	22	4	9
14 in. × 8 in.	12	1	0	12	16	3
Green Randoms, per ton				8	3	9
Grey-green do., per ton				7	3	9
Green peggies, 12 in. to 8 in. long, per ton				5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey			Med. Green		
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18s. 0d. per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard,			
Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued on page* xxiv

CARPENTER AND JOINER : *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic :			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work :			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS :			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY :			
Fixing only (including providing screws) :			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour ;* MATE, *do.* 1*s.* 3½*d. per hour ;* ERECTOR, 1*s.* 8½*d. per hour ;* FITTER, 1*s.* 8½*d. per hour ;* LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel :			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour ;* MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc. :			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	6	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only :			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour ;* LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¼ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass : 4ths in crates :			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft	0	1	1

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span, 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour ;* LABOURER, 1*s.* 3½*d. per hour ;* FRENCH POLISHER, 1*s.* 8½*d. per hour ;* PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£3	0	9
Linseed oil, raw, per gall.	0	4	6
DO., *boiled, per gall.*	0	4	9
Turpentine, per gall.	0	4	7
Patent driers, per cwt.	1	10	6
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	2	2	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	6
DO., *flat, per gall.*	0	15	6
DO., *paper, per gall.*	1	2	6
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, ⅝ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅝ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	⅜ in.			½ in.			⅝ in.			½ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	5	5	2	5	4	3	7½	6	4½	8½	7	6
Alder	5	5	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	10½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

BUILDING CONTRACTS OPEN

Unless the contrary is expressly stated, all deposits required for bills of quantities, etc., are returned on receipt of bona-fide tenders. The words "Fair Wages Clause" inserted in certain paragraphs signify that persons tendering must conform to a fair wages clause in the contract, which requires them to pay the rates of wages current in the district. Application for plans and particulars should be made to the address given at the end of each entry.

HELSTON, CORNWALL: SCHOOL

May 17.—For the erection of a proposed new Sunday School at Godolphin Cross, Helston. P. Smitham, Godolphin Cross.

BURY: FLATS

May 19.—For the erection and completion of 100 two-bedroom flats upon land at Woolfold, near Tottington Road, for the Bury Corporation. John Chadwick, Borough Engineer, Municipal Offices, Bank Street, Bury. Deposit £3.

LIVERPOOL: SCHOOL

May 19.—For the erection of proposed new elementary school at Whitefield Road, Liverpool, for the Corporation. The Land Steward and Surveyor (Architectural Department), Municipal Buildings, Liverpool. Deposit £3 3s.

FARNWORTH: HOUSES

May 19.—For erection of 192 houses within the district, for the U.D.C. The houses will be divided into the following contracts: Openshaw Place estate—(1) thirty-three houses, (2) thirty-four houses, (3) thirty houses, (4) twenty-two houses, (5) thirty houses; Fern Street (No. 2 scheme)—(6) eighteen houses, (7) sixteen houses; Norris Street scheme—(8) nine houses. F. Ashton, Engineer and Surveyor, Town Hall, Farnworth. Deposit £2.

BOOTLE, LANCS: HOUSES

May 20.—For erection of 100 houses, in pairs, to be erected on land north of Park Lane, for the Corporation. The Borough Engineer, Town Hall, Bootle. Deposit £2 2s.

LEEDS: SCHOOL

May 21.—For all or any of the various trades required in the erection of the proposed open air school, Lawns House, Farnley, for the Leeds Education Committee. The Education Department (Architects' Section). Calverley Street, Leeds. Deposit £1 1s.

HEMEL HEMPSTEAD: SCHOOL

May 22.—For erection and completion of a new County Council secondary school to accommodate 375 scholars at Hemel Hempstead, for the Hertfordshire C.C. W. J. Kieffer, Architect, 83 Pall Mall, London, S.W.1. Deposit £1 1s.

CHISLEHURST, ETC: TELEPHONE EXCHANGE

May 22.—The Commissioners of His Majesty's Works, etc., invite tenders before 11 a.m. on (a) May 22 for erection of a telephone exchange at Chislehurst, Kent; (b) May 23, for erection of a radio assembly block, a laboratory and workshop at the Post Office Research Station, Dollis Hill, Cricklewood, N.W. The Contracts Branch, H.M. Office of Works, King Charles Street, London, S.W.1. Deposit £1 1s.

STAFFORD: HOUSES

May 23.—For the erection of fifty-eight houses of the non-parlour type, on the Prospect Road housing estate, for the Corporation. W. Plant, Borough Engineer, Borough Hall, Stafford. Deposit £1 1s.

LONDON COLNEY, HERTS: SCHOOL

May 23.—Erection and completion of an elementary school to accommodate 200 scholars at London Colney, nr. St. Albans, for the Hertfordshire C.C. The County Surveyor's Office, Hatfield. Deposit £3 3s.

ILFORD: HOUSES

May 24.—For erection of 146 houses, together with the necessary house drains, at the Fencepiece Road housing estate, Barkingside, for the T.C. L. E. J. Reynolds, Borough Engineer, Town Hall, Ilford. Deposit £5 5s.

BOLTON: BUILDINGS

May 24.—For the erection of (1) new sessions hall and police building: (2) library, museum and art gallery; (3) extensions to the existing town hall, proposed to be erected on land in Victoria Square, Bolton, for the Bolton Corporation. Samuel Parker, Town Clerk, Town Hall, Bolton. Deposit £5.

WOLVERHAMPTON: SCHOOL

May 24.—For the erection and completion of a large new technical college in Wulfruna Street, Wolverhampton, for the Wolverhampton and Staffordshire Technical College. The building will be a three-story block, having an aggregate floor space of approximately 58,000 feet super. T. A. Warren, Clerk to the College Governors, Education Office, North Street, Wolverhampton. Deposit £10 10s.

WHEATLEY, DONCASTER: HOUSES

May 26.—For the construction of twenty-three houses at Wheatley, for the Doncaster R.D.C. F. O. Kirby, Borough Engineer, 2 Priory Place, Doncaster. Deposit £5 5s.

LONDON (PADDINGTON): DEMOLITION

May 26.—For demolition, etc., works and reconstruction of wharf building and contingent works at the southern end of No. 26 wharf, 175 Harrow Road, W.2. for the Paddington B.C. The Borough Engineer, Town Hall, Paddington, W. Deposit £1 1s.

CLEVELEYS: LIBRARY

May 28.—For erection of a branch library at Cleveleys, for the Lancashire E.C. Stephen Wilkinson, County Architect, 16 Ribblesdale Place, Preston. Deposit £2.

CAIRO: PUMPING STATIONS

August 17.—Tenders are invited by the Mechanical Department, Ministry of Public Works, for supply and erection in the Isolated Basins, Aswan Province, of fifteen electric pumping stations, complete with all the necessary building work, pumps, motors, switchgears and pumphouses, etc. The Chief Inspecting Engineer, Egyptian Government, 41 Tothill Street, S.W.1. Copies of the conditions, etc., are obtainable at £10 5s. per set, which sum is not returnable.

MEASURES BROS. 1911 LTD.

Section Sheets and Estimates on Application.



Telegrams: "Measures, Boroh, London."

STEEL JOISTS

Structural Steelwork — OF — Every Description.

Prompt Delivery from Stock at Lowest Market Prices.



Telephone No.: Hop 3985 (4 lines).

SOUTHWARK STREET, LONDON, S.E.



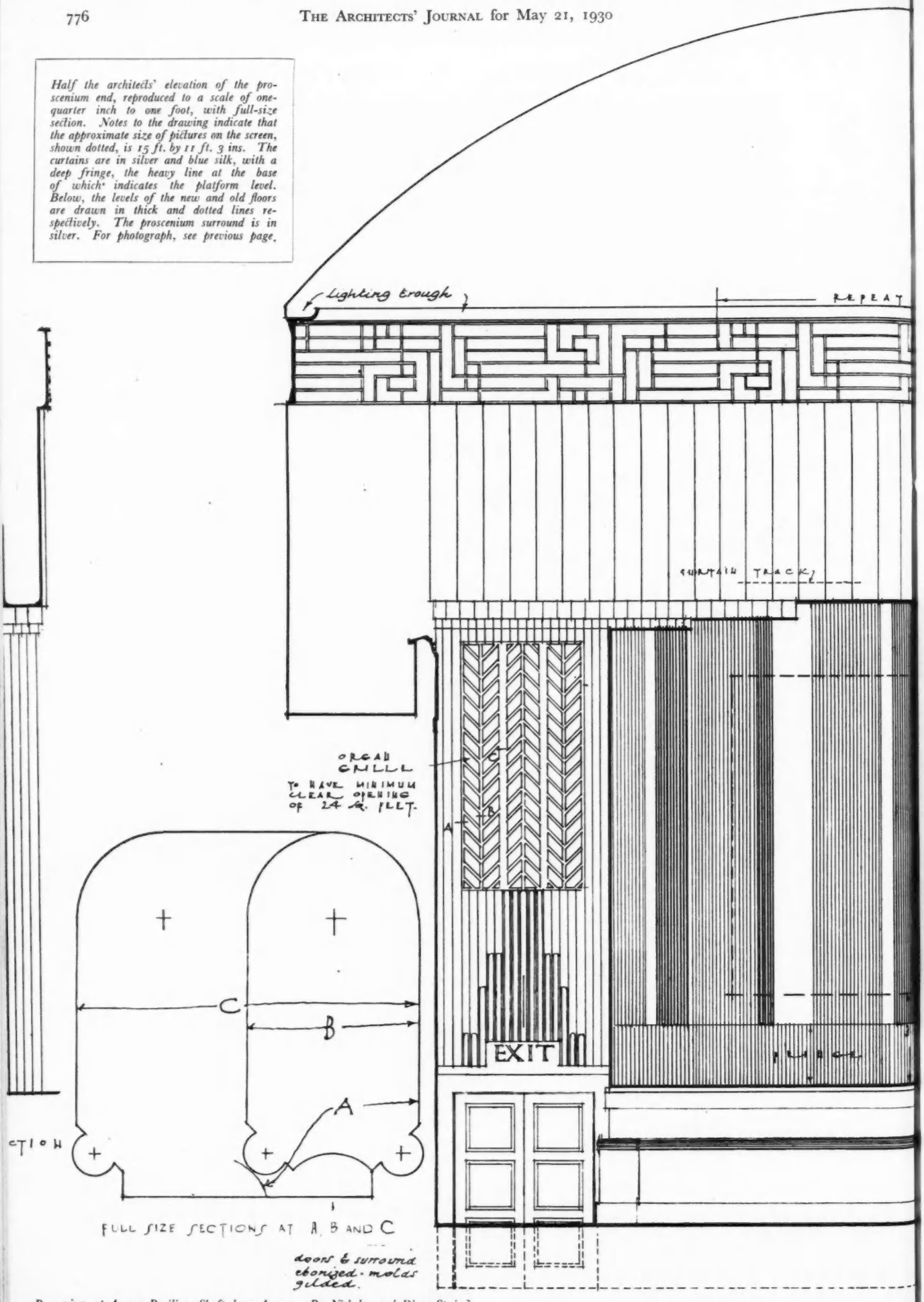
AUDITORIUM AND PROSCENIUM, AVENUE PAVILION CINEMA, SHAFTESBURY AVENUE, W.

Designed by NICHOLAS & DIXON-SPAIN

THE original Avenue Pavilion was about eighteen years old, and was one of the earliest cinemas to be erected in London. The interior has now been remodelled, adapted for "talkies," and entirely redecorated on restrained modern lines. Sight lines have been adjusted by alterations to the floor level, etc., and new seating accommodation has been installed and somewhat increased. In the auditorium are nine panels containing figures, specially modelled by Arnold Auerbach, the sculptor. Two of these are illustrated on page 802.

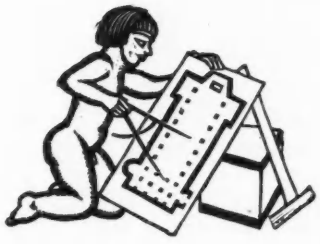
Details and particulars of the proscenium appear on the following page. The cinema was reopened on Monday of last week.

Half the architects' elevation of the proscenium end, reproduced to a scale of one-quarter inch to one foot, with full-size section. Notes to the drawing indicate that the approximate size of pictures on the screen, shown dotted, is 15 ft. by 11 ft. 3 ins. The curtains are in silver and blue silk, with a deep fringe, the heavy line at the base of which indicates the platform level. Below, the levels of the new and old floors are drawn in thick and dotted lines respectively. The proscenium surround is in silver. For photograph, see previous page.



Proscenium at Avenue Pavilion, Shaftesbury Avenue. By Nicholas and Dixon-Spain.]

THE ARCHITECTS' JOURNAL



WEDNESDAY, MAY 21, 1930

CONDEMNED HOUSES

Grievances under the Rent Restriction Act

IT is quite time that the Rent Restriction Act put its own house in order. The dilemmas which have arisen under it are numerous, and of all sorts, and of varying importance, but the case, typical of many, recently narrated in *The Times*, has its own interest for architects.

The protection of tenants under the Act virtually ceases in the event of the sanitary authority condemning a house as unfit for human habitation; unless its insanitary faults are rectified, an eviction order can be enforced. But before that sad condition is reached, a state of things may arise equally threatening to the inhabitants: the house may become a dangerous structure according to the local surveyor, and a notice to that effect may be issued. Then the fun begins.

The owner has to repair, and almost certainly has to rebuild, one, at least, of the walls. It is expensive work, necessitating in some cases professional advice and in every case the employment of a builder who is used to such dubious operations. A lump sum price cannot be obtained. The work goes on from day to day very slowly, with the costs mounting rapidly and out of all proportion to pace. Money which the owner had saved for rebuilding in due course is swallowed without increasing the amenities of the house, or to any great extent the value of the property. The presence of the tenant in the house swells the cost of the repairs.

The owner is justifiably annoyed, for if there were no Act he would have given his tenant notice, pulled down the house, and rebuilt with up-to-date conveniences, using the old materials as far as possible. It is not fair to say that the dangerous state of the house is due to the owner's former neglect; it is more probably due to the passing of heavy traffic, or the effect of a long drought on clay soil.

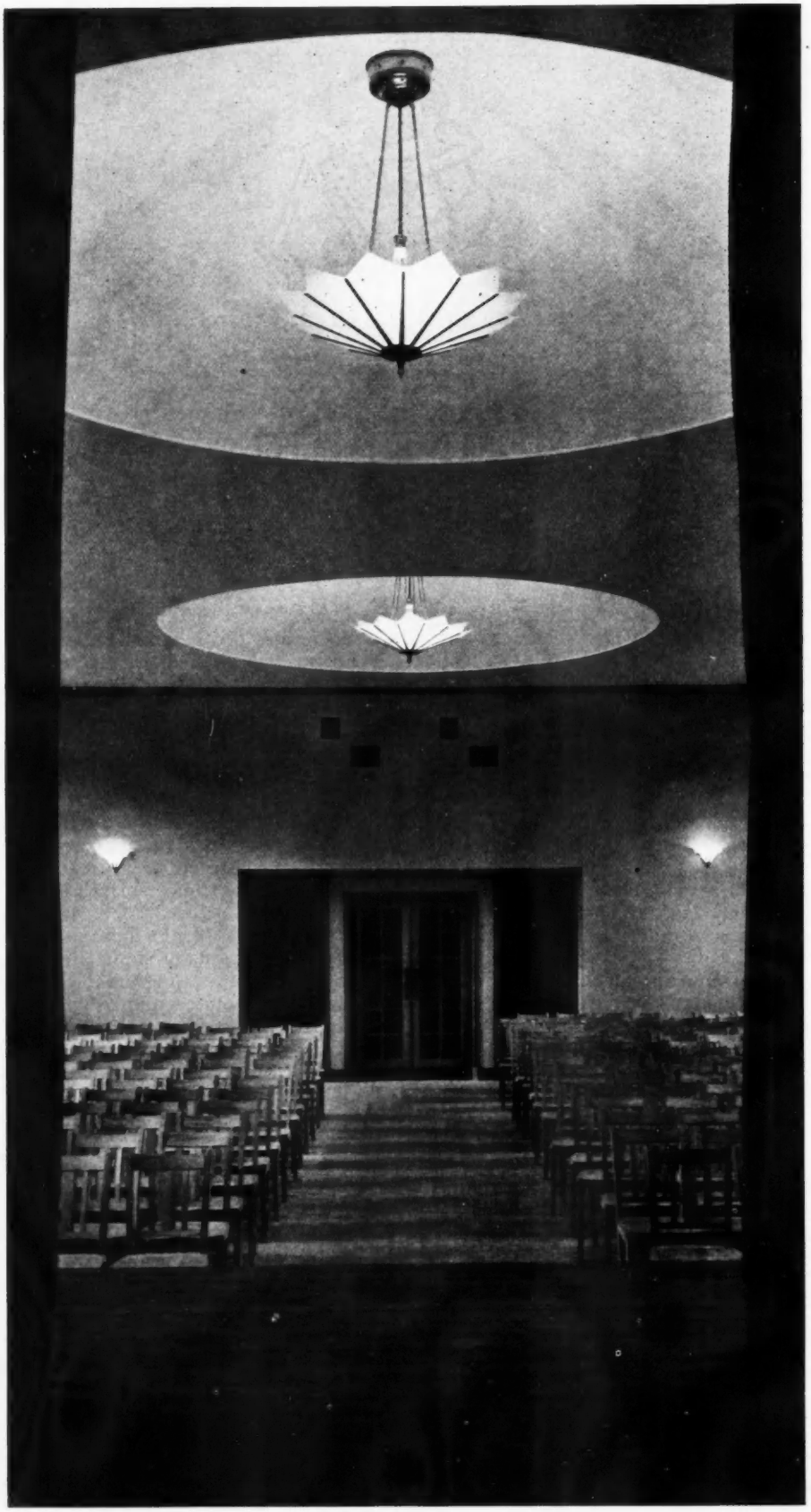
Is there not a case here for an exception to be made to the operation of the Act? The owner thinks so, and considers that he should be allowed to submit a scheme for rebuilding to the local authority, and, on its approval, the tenant should be liable to quit.

Let us now look at the matter from the tenant's point of view. He has a house which, however picturesque with age, has been noted as a dangerous structure. The tenant wishes to leave, before his house-front falls into the street, a happening promised when the next steam lorry passes, probably at dead of night. Also, his wife is disturbed in mind at the thought of the discomfort, the dust, the rain and the draughts which will accompany the almost endless work of reconstruction. She supposes the children will choose that time for measles or influenza (and they are sure to). But the tenant can find nowhere else to go. The Council houses are "booked up," the family is too large for lodgings, and all the other sitting tenants are sitting tight. So the tenant, though his interest is quite compatible with the landlord's, has to stay and go through with the dust and measles.

Obviously the matter has to be taken a step farther, to the third party involved, who is the local authority. Landlord and tenant must combine and demand of their Council—the landlord that he be allowed temporarily to shore up the dangerous structure; the tenant that he be provided with another dwelling as early as possible and at a rent which he can afford to pay.

At first sight this seems making a large demand on the local authority. But, after all, the surveyor must have had his eye on the old house for some months. Even motor lorries and droughts do not bring down walls without warning. He has had plenty of time in which to warn his Council that there will be a call for a dwelling within a short period, and that the Council will be morally liable to provide it.

We think, then, that this problem of the dangerous structure, inhabited by the protected tenant, is capable of solution, and that, on the scheme of rebuilding being approved, the local authority must provide other accommodation for the tenant. We hope some such amendment to the Act may become law.



A MODEL VILLAGE HALL: STEWARTBY, BEDFORD

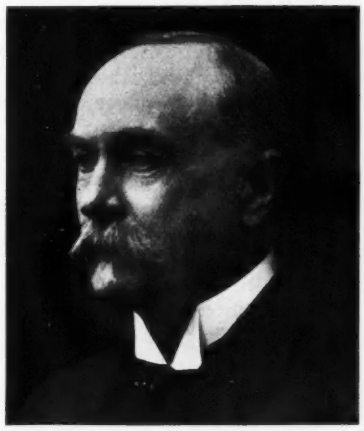
Designed by E. Vincent Harris

Looking between curtains of silvery-brown velvet, partially drawn across the stage, there are revealed a maple floor, buff walls, with doorway woodwork painted grey, and a white ceiling—a colour-scheme dominated by the domes and hanging lights. The cinema projection-box openings are the visible signs of adaptability to a number of social uses that have been foreseen. Further illustrations and a description appear on pages 782–5.

NEWS & TOPICS



William J. Locke, the famous novelist, who died in Paris last week, wrote several of his early stories during the ten years when he was acting as secretary of the R.I.B.A. An appreciation appears below.



Sir Reginald Blomfield who, referring to Charing Cross in his last week's speech at the Annual Dinner of the London Society, advocated the retention of the present station and the formation of a new road bridge.

THE R.I.B.A. BANQUET

THE annual banquet of the R.I.B.A., held at the Guildhall last Thursday, provided an appropriate setting for the first of these functions to be presided over by Sir Banister Fletcher, who is as well known for his public work on the Corporation of the City of London as he is to architects. The evening was a thoroughly successful one and the ovation which greeted the President was a sincere and spontaneous testimony to his popularity. But the Guildhall has one defect: it is impossible for the majority of any audience to hear speakers who are unaccustomed to its peculiarities. This prompted some of those present to ask whether it might not be better to curtail the flow of post-prandial eloquence and devote part of the evening to a dance.

★

The main purpose of this annual function is to provide an occasion for friendly intercourse between members of the Institute, to give them an opportunity of entertaining their patrons, distinguished personages in the world of art and letters, and their wives, sisters, aunts, cousins and other members of the fair sex. I think that a dinner of modest length followed by a limited amount of oratory and a longer period for social intercourse would add to the popularity and usefulness of this annual function.

WILLIAM JOHN LOCKE, HON. ASSOC. R.I.B.A.

Responding to my request, Sir John Simpson sends me the following brief appreciation of the late W. J. Locke. Locke (he writes) was a celebrity both in the Old World and the New. Details of his life and his literary work have been given in the entirely admirable obituary of *The Times* and in countless other Press notices at home and abroad. It is needless to repeat them here. But in THE ARCHITECTS' JOURNAL it is fitting to record that the retirement of W. J. Locke, in 1908, from the post of secretary to the Royal Institute evoked such expressions of regret as few officials can have received or merited. To those who are now senior members of the architectural profession, and had the privilege of knowing and working with Locke, his death comes as a personal bereavement. When he became secretary, the younger men, who had not before been much encouraged to interest themselves in the debates and government of the Royal Institute, found themselves welcomed at Conduit Street by a friend who placed a mere Associate as high in his regard as any Fellow or Member of Council.

His attitude brought new life and vigour to the Institute. Serving under the Consulships of Aitchison, Emerson, Webb, Belcher, and Collcutt, his delicate courtesy, his tact and his shrewd ability, made him in his ten years of office the friend of the whole profession. A scholar, and man of the world to boot, he had a real affection for architects and most helpful sympathy for those who sought his advice in the troubles incident to their calling. His influence with Presidents, Councils, and Members was consequently very great, and their trust in him implicit.

★

At the Continental meetings of the "Comité Permanent" he was greeted with affection by the architects of every nation, and was himself a member of many of the foreign professional societies. But France was the country of his choice. There he lived, and had rare knowledge of its people, who were his friends. There he ended his days.

★

Born in 1863, he had lived sixty-seven years when the months of pain ended which he had borne with courage and sweet temper. He was cheered in his illness by the success of his last book, *The Town of Tombarel*; a fantasy of France, with architects and other artists haunting its pages, as he loved to have them. Was not the "Beloved Vagabond" himself an *architecte manqué*? By all who knew him (concludes Sir John) Locke was beloved, and he returned their affection. *Eheu, perniciosam jacturam!*

CITY ARCHITECTURE IN THE NORTH

London is apt to imagine, with its Kingsway and Regent Street, that wisdom will die with it alone. Not at all. The best modern commercial architecture, taken in the mass, is in Manchester and Liverpool. Work of character is more to be found there than in London. Nor is this surprising when one considers how powerful has been the effect of the Liverpool School of Architecture upon current work.

★

I have by me a description by Professor Reilly of an exhibition of architecture and its allied arts that has been held in a small public gallery that is of its kind unique, since it gives regular prominence to the work of local architects, sculptors, painters and craftsmen.

★

What is so heartening in this exhibition is to see the designs for churches, art galleries and, of nearly equal

importance to a city's street architecture, public-houses—and all by past students of the Liverpool School. And coupled with these the fine craftsmanship of men like Tyson Smith and Mr. Burdon, artists without whose help the growing tradition of Liverpool architecture could not hope to reproduce itself.

THE INFLUENCE OF THE LIVERPOOL SCHOOL

This is something to say for this school and for the whole system of school training, whenever it may be challenged. The prospectus of the Liverpool School (it is, by the way, one of the few schools that print a prospectus and illustrate students' work) shows that the training a man receives there does really qualify him to go forth and *design to build.*

★

Also, I think that the association with America gives a body of reality to the teaching that many other schools lack. To come into close contact with American organization, as some ten students from the school do every year, is to be fired by the desire to be an architect in every little detail, and not merely upon a drawing-board. That, and the extraordinary spirit of adventure that Professor Reilly brings to it, explain how it is that from a small and dingy little building by the University there spreads a mighty vista of fine buildings.

LIVERPOOL'S CIVIC CENTRE

Though Liverpool has the nucleus of a fine civic centre in the public buildings that were erected after St. George's Hall had been built on a wonderful site, one side of the great open space has never caught the reflection of the civic grandeur it faces: it still straggles uphill in a series of pubs and mixed property. Two things are going to change all this. One is the building of the entrance to the Mersey Tunnel at one end of the open space and facing the rear elevation of St. George's Hall; the other is the development of part of St. John's Lane, the street which never rose to the occasion. A syndicate has been formed to develop a large site for commercial buildings, and in order that it may have every chance of being worthy of its magnificent opportunity, the building is to be put up to open competition, the announcement of which was made in last week's JOURNAL.

ARCHITECTURE'S GROWING RECOGNITION

It is evidence of the growing popularity and social standing of architecture as an art that the *Journal of the Society of Arts* should, in one volume, report upon the Royal Academy architectural room, on a lecture read to the Society by Mr. Howard Robertson, on Dublin's architecture by Katherine Tynan, and on the preservation of rural England and West Wycombe in particular, work with which the Society has definitely associated itself.

★

It seems to prove that education is going to be the big stick to belabour the jerry-builder and the spoiler, and that taste will once again become a force strong enough to curb the loathsome vulgarity of the half-educated.

THE THEATRE OF THE FRIEZE

I called at the studio of Mr. Gilbert Bayes a week or so ago and saw him busily engaged in putting the final touches to his frieze for the exterior of the New Saville Theatre, Shaftesbury Avenue. This frieze is an interpretation of "Drama through the Ages," and would be unique even if only from the fact that the architects for the theatre, Messrs. T. P. Bennett and Son, have placed it



These three photographs of a portion of the frieze designed by Mr. Gilbert Bayes for the New Saville Theatre were expressly marked by him, as shown by white lines, to indicate how joins should fall.

only 15 ft. above street level. It is 115 ft. long and 6 ft. high, and consists of two main portions, divided by a big circular-headed doorway, and two smaller pieces returned at the end.

★

The accompanying photograph shows a portion of the left-hand frieze. Here are St. George and the dragon, with Cupid holding a shield, the Chester players in the background and, at the left end, a minstrel and the stage manager of the period with his staff of office. The right-hand frieze shows the Greek masked players, Roman gladiatorial shows, the Roman triumph and the Bacchanalia (20 ft. of which is on exhibition at the Royal Academy), the mediæval jester and the more modern harlequinade, Shakespeare, Marlow, a Punch and Judy show, and characters from modern crook and other plays. Mr. Bayes told me that the greatest relief on any part of the frieze is only about 1½ ins. Nevertheless, it seems to me that its carrying power will be much more than many reliefs of considerably greater depth. The frieze will be specially lighted at night.

LONDON BECOMING A BRICK CITY

It was a layman who observed, contemplating Grosvenor House and the new Gamages, that London was fast

becoming a brick city. If so, what is it but a reversion to the days before the eminent builder who found it all brick and left it all stucco?

A striking record of Old London appears in Canaletto's view of the city from the terrace of Richmond House, which lately hung among the Italian pictures at Burlington House—in which Wren's steeples soar up in a sunlit haze above a low and thickly-built city of dull-coloured brick. Other laymen confess themselves puzzled by the prevalence of plain wall-spaces in the new brick architecture. Restrained and simple wall surfaces are probably an acquired taste, which will come.

YORK MINSTER'S GLORIOUS WINDOWS

The society called the Friends of York Minster, which numbers about 1,200, is pledged to support the work of restoration and preservation of that venerable fabric. All those architects who visited York with the R.I.B.A. Conference last year will know that the glory of York is in its windows. The Friends, when they assembled in the Chapter House lately for their annual meeting, were surrounded by the monuments of their own munificence, for of the seven tall windows which London experts twenty-five years ago placed beyond repair, five now shine with all the radiance of coloured glass, as though they had but just left the artificers' hands. But of 111 windows that needed renovation ninety-four have been done or are doing, and still the work goes on.

FITTINGS FROM ARCHITECTS' OWN DESIGNS

My note in the May 7 issue, under the above heading, has brought in letters so numerous and interesting that I have handed them over to the Editor to publish in the much greater space at his disposal. It remains to thank my correspondents and to congratulate several of them, and the British manufacturers concerned, on their close and happy relationships. ASTRAGAL

The Moral of Charing Cross

LETTER FROM SIR BANISTER FLETCHER

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—In the interesting leading article in your issue for May 14, you invite your readers to offer suggestions for the formation of "a town-planning authority for the whole of London, whose members will have authority to decide all the major questions of urban development in so far as these concern the co-ordination of traffic routes, the provision and preservation of open spaces, and the general control of street architecture in the Metropolis."

As Chairman of the Greater London Regional Planning Committee, may I point out that that Committee has worked out a scheme for the formation of precisely such an authority, which is set out in their first report, recently published? (Obtainable from Knapp, Drewett and Sons, Ltd., 30 Victoria Street, S.W.1. Price 5s.)

It is suggested by the Committee that the proposed body should "consist mainly of persons appointed by, but not necessarily members of, the authorities which would be financially responsible for the regional proposals, namely, County and County Borough Councils within the region, with the addition of the Corporation of the City of London, and should be empowered to elect its chairman from within or outside its own body."

The Committee is pressing its 130 constituent authorities and also the fourteen "sub-regional committees" within the region to express their views upon these proposals. I may say that the response received up to the present is most satisfactory, the large majority of the authorities which have replied approving the proposals as they stand. Among suggestions for modification is one for empowering the body elected in accordance with the Committee's recommendation to co-opt a certain number of persons recognized as having expert knowledge in the subjects with which the new authority would have to deal. No doubt further ideas on the subject will be evolved, and the Committee will be glad to receive any advice and assistance in the matter.

It is to be remembered that the Greater London Regional Planning Committee was appointed for three years from November 1927. The constituent authorities have agreed to extend this period to the end of the financial year—i.e. to the 31st March, 1931. It will then be necessary, if the work so well in hand is to be continued, either to reappoint the Committee or to create a new body to take its place. For the reasons given in its report, the Committee consider the latter the more desirable course. In order to carry out the proposal in its entirety, legislation will be necessary, and it is to be hoped that facilities for this will be given. The Minister of Health, at the deputation on the 26th November, 1929, while clearly in sympathy with its proposals, said, as was to be expected, that it would not be possible to go forward with the idea unless it met with the approval of the local authorities. It is therefore most desirable that the views of these authorities shall be expressed as soon as possible. The Committee will of course take into careful consideration any modifications of its proposals which these authorities may suggest and also any recommendations which may be made by responsible societies which are concerned with the subject. In this connection I shall be greatly interested to see the response to your invitation to your readers, and trust that correspondents will take note of the proposals of the Greater London Regional Planning Committee when they express their views.

BANISTER FLETCHER

[It was only lack of space that forbade our referring to the fact that a detailed scheme for a town-planning authority was contained in the report issued the other day by the Committee of which Sir Banister Fletcher is chairman. We hope to return again to the interesting suggestions made in this report, which was reviewed in these pages on April 30 last. Meanwhile, our readers will be gratified to learn that they have had a sympathetic reception from the authorities constituting the Regional Planning Committee.—ED., *A.J.*]

SETTLING-UP HONEYWOOD

By KARSHISH

Karshish, in The Honeywood File, *half-promised a sequel. Readers will need no reminder that the super-paint that Sir Leslie Brash coerced his architect, Spinlove, into using, gave early signs of "crawling out of the front door and off home," in the phrase of Grigblay, the builder. In the case of any building adventure there are bound to be many vexed questions of defects, renewals and replacements, of accounts and extras, some of them involving the liability of both architect and builder. They were assuredly not absent from Honeywood Grange, but they were left more or less in the air.* Settling-up Honeywood *is to disclose how matters fell out; the first instalment will appear next week.*



The main entrance front, with its clock turret and belfry, carries emblematic ornamentation in a gilded beehive and a device in full colours on copper over the doorway-opening itself. The walls and pillars, in rustic brick, display fine craftsmanship, further exemplified in the photograph on the facing page. Immediately within is a four-square entrance-hall with tablets on each wall commemorating those employees (of the London Brick Company and Forders, whose workers the village was built to house) who fell in the war.

HALL IN A MODEL VILLAGE

Stewartby, Bedfordshire

DESIGNED BY E. VINCENT HARRIS

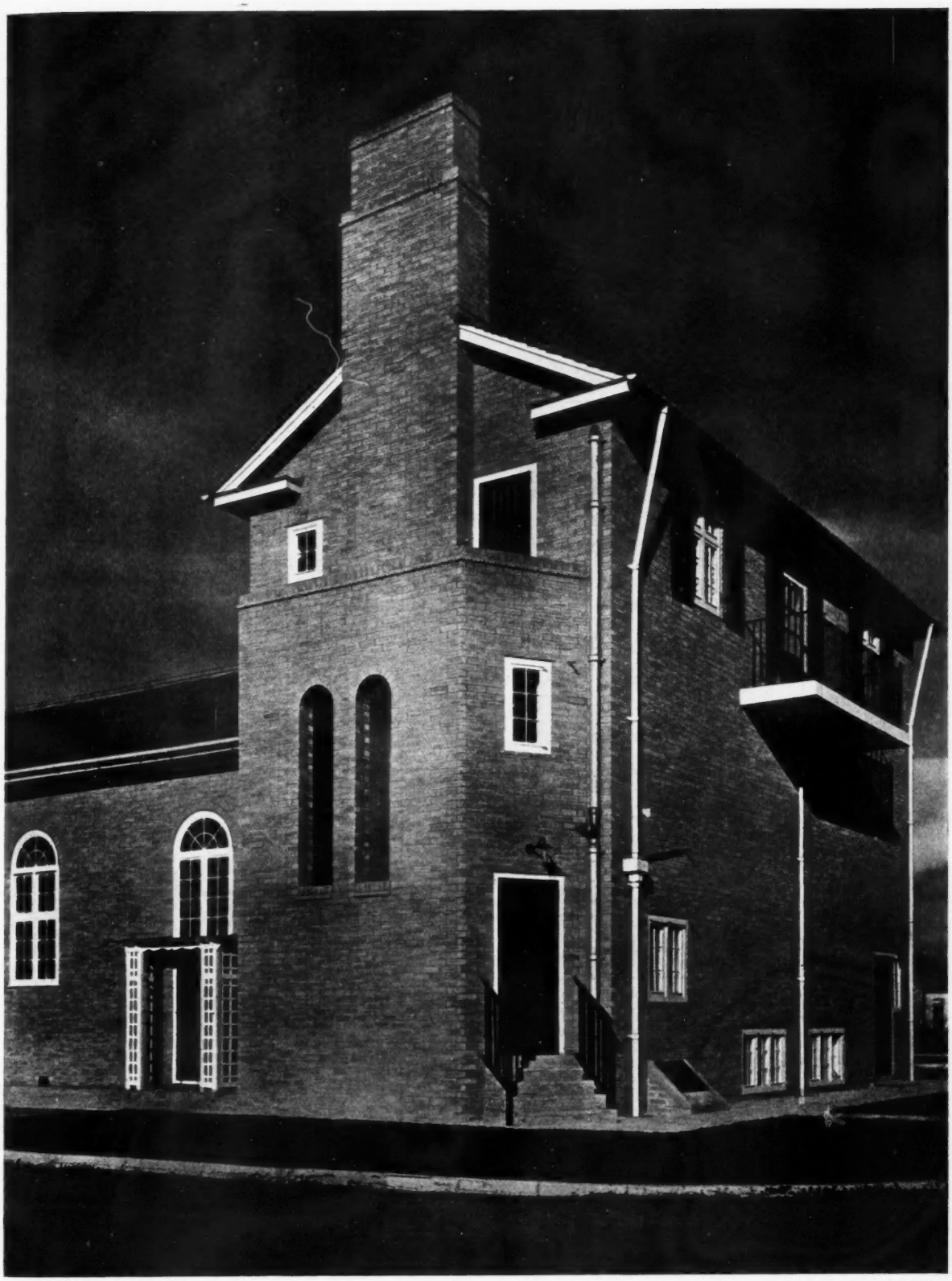
THIS village hall is built in the most prominent position in Stewartby model village, and completes the scheme of it. The name is adapted from that of the chairman of the London Brick Company and Forders, by whom the village has been built for their workers.

Designed to be in keeping with the general character of the village, and intended for meetings and social entertainments, including theatricals and the cinema, the hall has naturally been built throughout of the company's bricks. The interior walls are of cellular Flettons and the exterior walls of multi-coloured rustic Flettons, produced with a rough combed surface which, by reason of special treatment in the burning, are given a variety of warm shades of brown. The facing bricks have been selected to give a pleasant warm, sunny brown effect, which deepens into purple in the shadows.

The timbered gable surmounting the four-square columns of the entrance front is finished in white and decorated with a golden beehive, symbolic of the industry. Above the gable is a clock turret with copper cupola, on which, as a weather-vane, is mounted a golden ship. This ship is the complement of the Stewart arms which are painted in full colours on copper in the tympanum of the entrance doorway. At the other end of the building, above the stage, is a caretaker's flat.

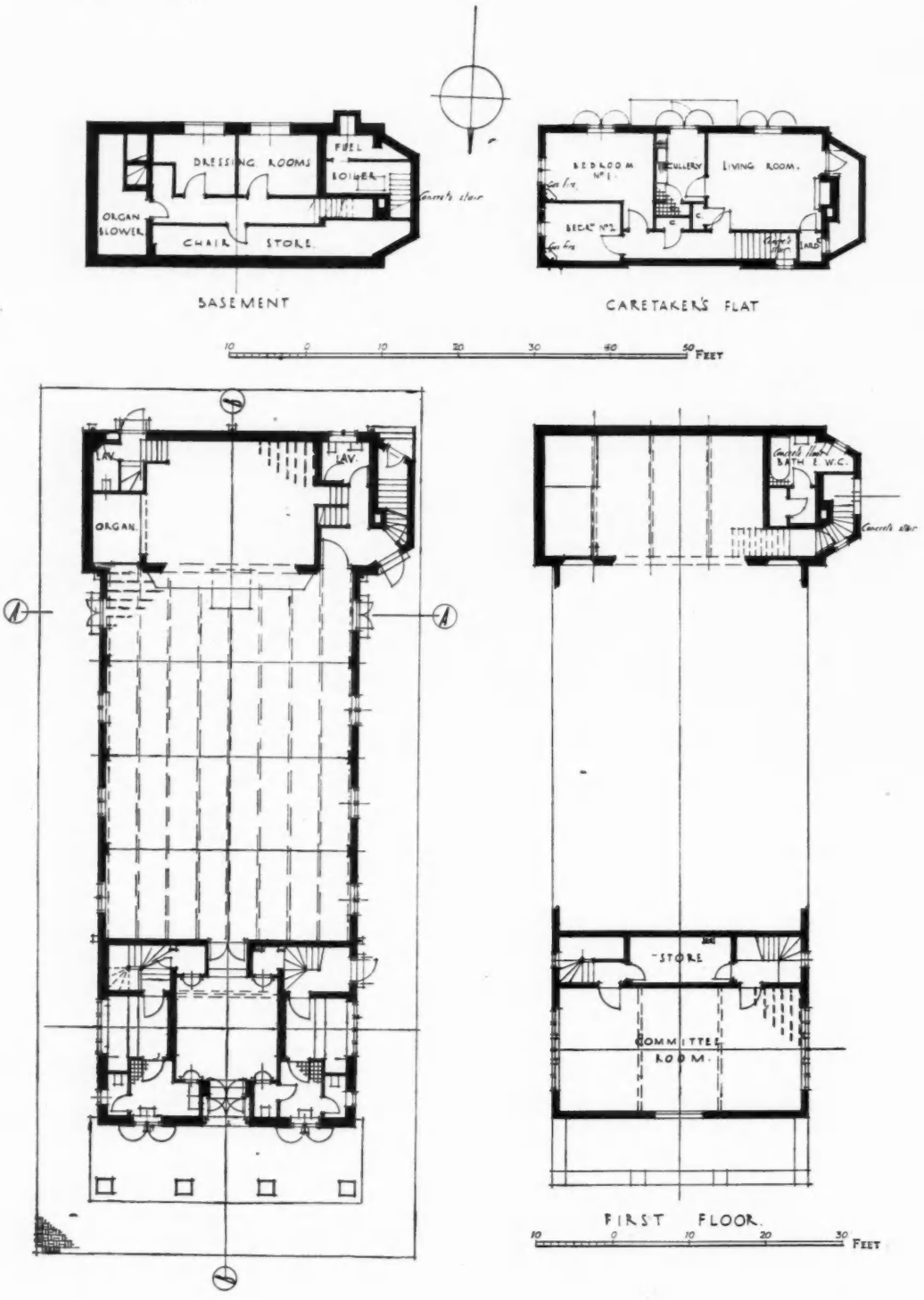
In contradistinction to the red-tiled roofs of the village, the hall is roofed with the finest of Westmorland green slates; and the green note is repeated in the doorways, shutters and external metal work.

The interior colour scheme is very simple. The ceiling is white, and the walls are in a medium buff, which tones well with the maple floor. Grey is used for the doorways and stage woodwork, while the curtains are of silvery brown velvet. The seating capacity is about 300, and the entrance lobby forms a war memorial to the company's employees. The contract price was about £5,300. Mr. Frederick Walker, architect for the estate, supervised the erection.



Stewarthy Village Hall, Beds.] [*By E. Vincent Harris.*

The rear of the building, from the south-west. Here is, on the second floor, the caretaker's flat, with its separate entrance doorway on the splayed end, its stairway running up past the pair of deep openings, free to the air, and its balcony. A portion of the hall, with a side entrance, is seen to the left. The windows near the ground light dressing-rooms under the stage, and beyond is the stage door.

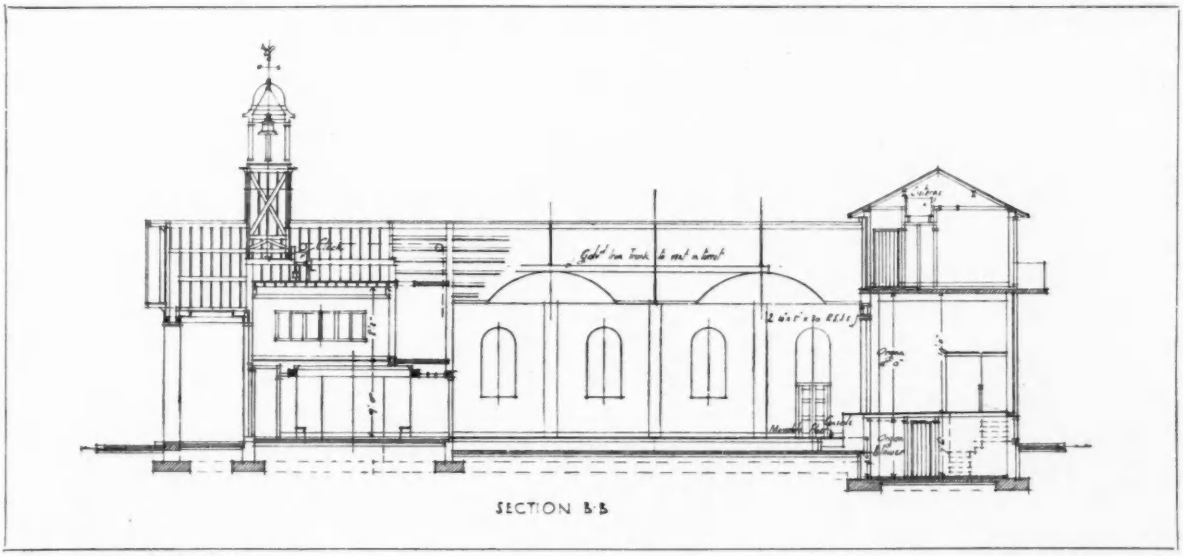


Stewarthy Village Hall, Beds.] *[By E. Vincent Harris.*

The front entrance of the hall faces north. At the back end is the basement, under the stage, with dressing-rooms connecting therewith. The hall proper extends through two floors, but room has been found, on the first floor, behind the proscenium line, for stairs and lavatory for the caretaker's flat that occupies a second-floor extension over the stage. On the first floor, also, over the memorial lobby, is a committee-room.

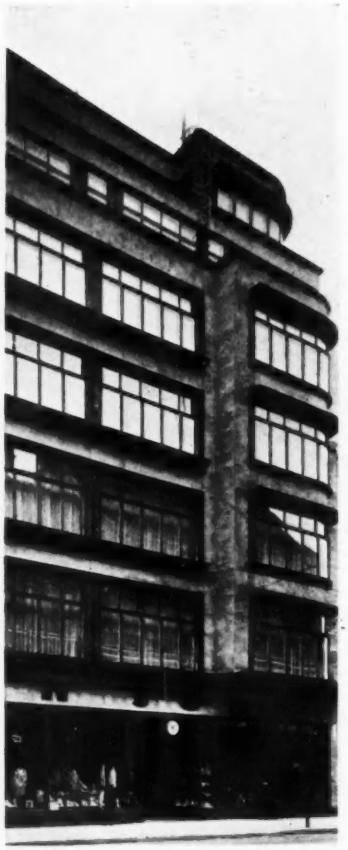


A view of the interior of the hall, showing the stage and one of the ceiling lights. A section of the flooring immediately at the front of the stage is movable, so as to allow of its extension at will. The door on the right gives access behind the scenes; the organ console is made to balance it, on the left. A view taken from the stage forms the subject of the frontispiece of this issue (page 778).



Stewartby Village Hall, Beds.] *[By E. Vincent Harris.*

This longitudinal section is reproduced to the same scale as the plans on the facing page, and shows the two domed lighting recesses in the ceiling of the hall, which also serve the purposes of ventilation, being connected to a trunk communicating with a vent in the clock and bell turret. The organ is housed to one side of the stage, with blowing-chamber in the basement beneath.



An old building reconstructed on lines of mathematical symmetry, with characteristic cornerwise fenestration: the store of Herpich Söhne, in Berlin.

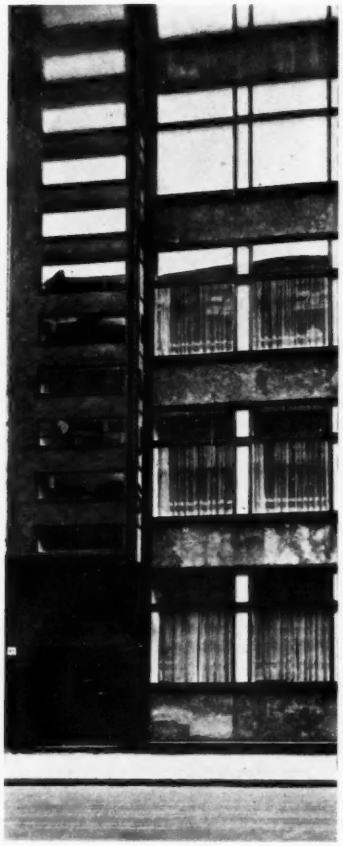


The Einstein Tower, Potsdam, an early design in concrete, by Mendelsohn.

MENDELSOHN

THE examples here reproduced have been selected as typical of the main aspects of Mendelsohn's art. It was in 1921 that the Einstein Tower drew attention to his arrival upon the scenes.

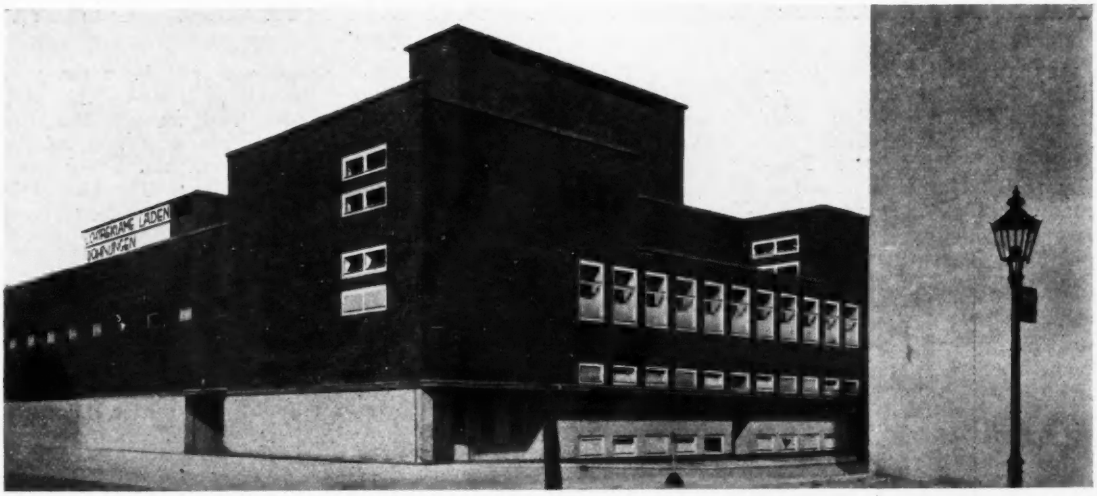
A good many reconstructions marked the years that immediately followed. They began with the enlargement of the "Mossehaus," the headquarters of the newspaper and publishing interests in Berlin. The old twin façades were cleft by a new entrance and staircase well, and topped by a



A new office-block in Berlin. Letters of its name, "Deukon Haus," can be discerned, running down the vertical sign above the entrance.



Another store building with vast curvilinear windows that are made to tell the more by contrast with the comparatively modest horizontality of the main mass: Schocken's, in Stuttgart.



Everyone is familiar with the great curving front of the Universum Cinema, Berlin; the stage end, with its simple play of masses, is less well known but equally impressive.

IN MANY MOODS

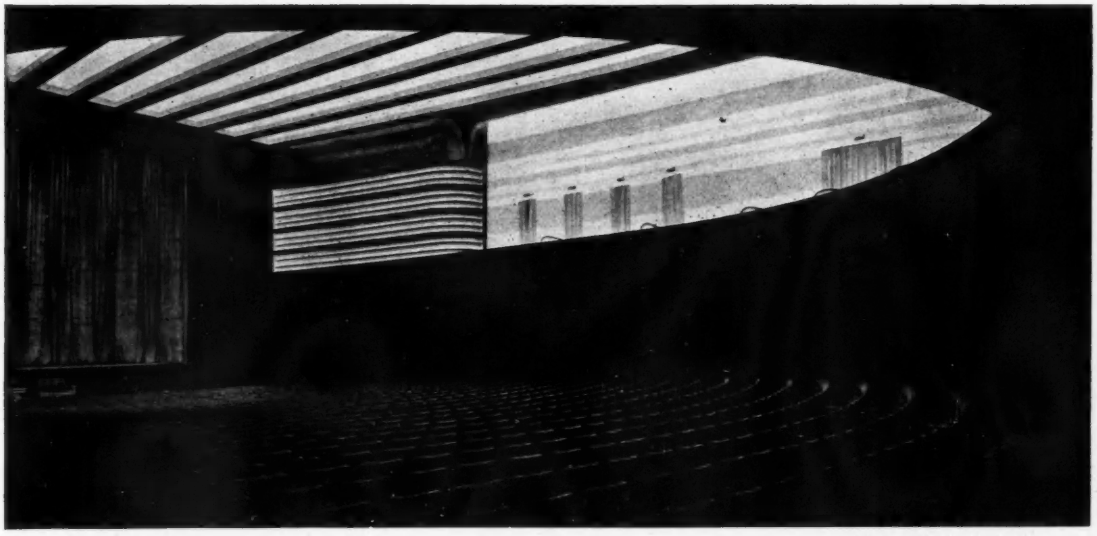
belt of new floors above the old attic story, having no stylistic relation with what was retained. Another typical remodelling is here illustrated, together with photographs of several original designs. These are among a large collection now on view at the Architectural Association, as whose guest the eminent German architect is at present in this country. So widespread was interest in his lecture, on Monday, that it was repeated the following day.



Above the entrance of the Deukon Haus the vertical sign is bent at right angles to form a shelter.



Straight lines and curves figure, in yet another guise, in these flats behind the Universum building.



[*Photographs by F. R. Yerbury.*]

The interior of the Universum, looking towards the stage, has been criticized as offering no solution of the problem of relating the rectilinear proscenium to the sweeping curves of the house.

GREAT BRITAIN'S FIRST RHEUMATISM CLINIC

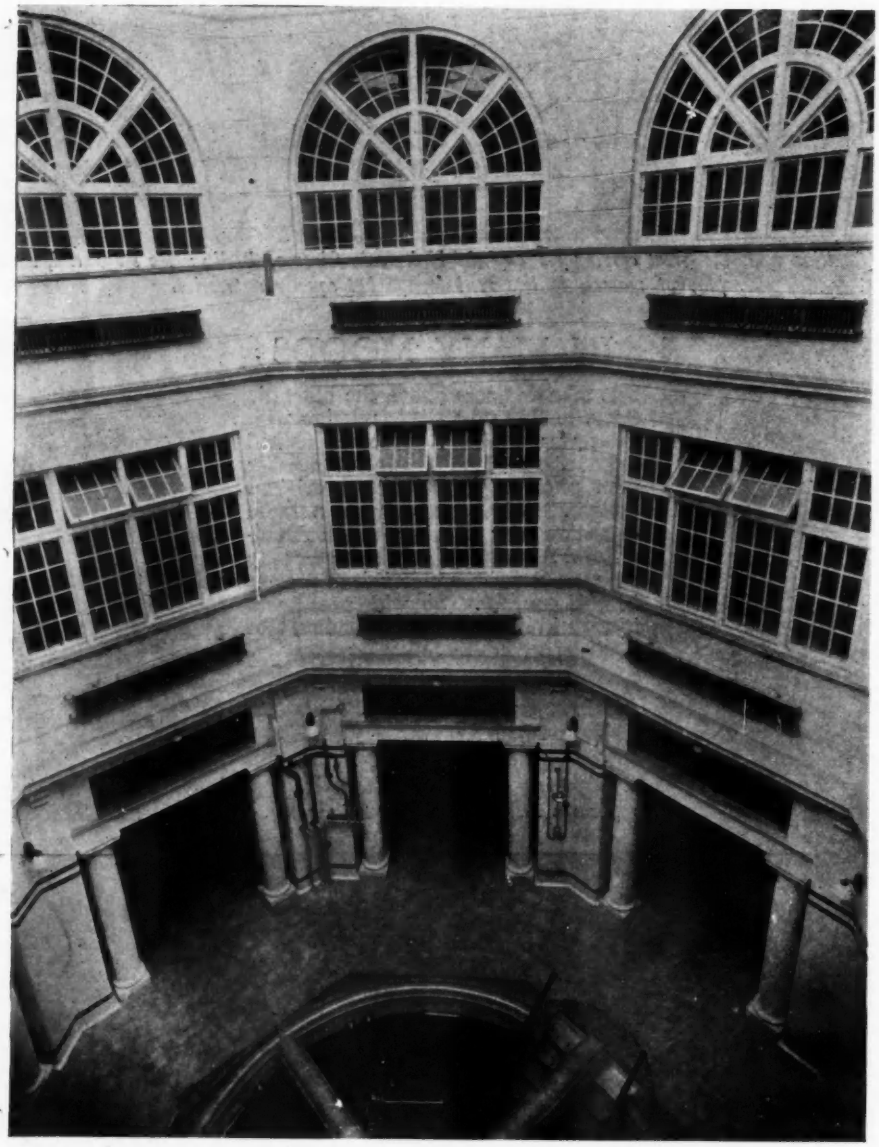
DESIGNED BY THOMAS A. POLE

IN 1927 the International Committee of Medical Hydrology approached the British Red Cross with a view to establishing a clinic for the treatment of rheumatism in London. By 1928 all arrangements had been made, a successful appeal for funds resulted, and a representative committee comprising all interests concerned, was formed.

After much investigation the Committee secured a Crown lease of the old Regent's Park Baptist Chapel, 18 Park Square East, and Mr. Thomas A. Pole, the architect, who had previously visited a number of French and German centres and carefully studied the problem from all points of view, was instructed to prepare plans, etc.

The building was originally designed by John Nash in the late-eighteenth century as a panorama, and it was converted into a chapel about 1850. It was extremely irregular on plan, being shaped somewhat like a fan. In the basement were classrooms about 10 ft. high, above this the chapel, about 34 ft. high, and a one-storied annexe attached. Practically all the internal work was gutted for the purposes of the clinic, leaving the main walls only. The annexe has been converted into staff and administration offices, with the boiler and power-house under. The chapel itself was divided into three floors, each about 14 ft. high, and the problem of lighting the building was solved by the introduction of a central octagon 36 ft. across, running through the three floors and crowned with a glass dome.

The ground floor is devoted entirely to hydrotherapy treatment. There is a good entrance hall from Peto Place,



The British Red Cross Society's Clinic was officially opened by Her Majesty the Queen. Its most impressive feature is the central octagon, which contains the manipulative pool for the hydro-therapy treatment. The view is taken looking from one of the semicircular windows down towards the pool.

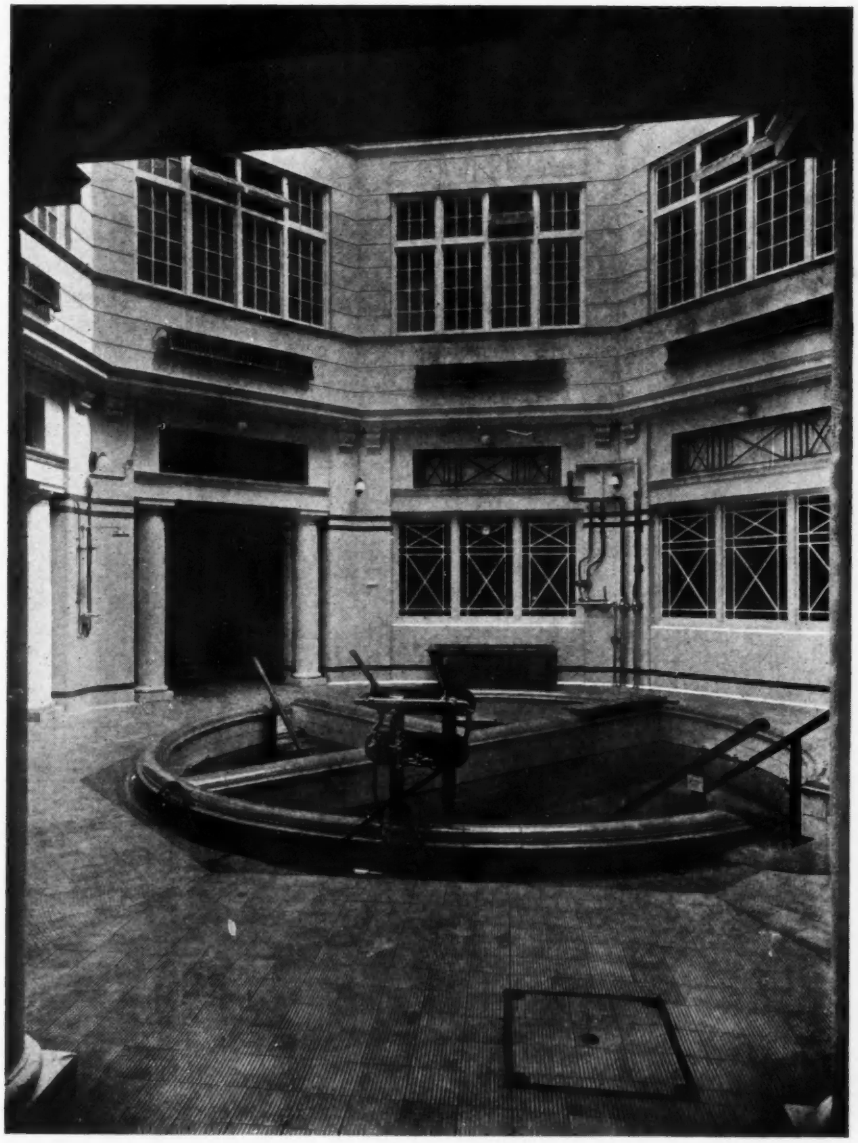
with a main stairs and lift, and on the left is the main waiting-room, inquiry office, etc. The central area is occupied by the manipulative pool. Hot-air rooms, vapour rooms, various douche rooms and baths and treatment rooms are arranged. Dressing-room accommodation, linen rooms, attendants' room, consulting room and small waiting-rooms, together with the necessary lavatories for the staff and patients, and a large general rest room are also provided. There are escape stairs in the north and south angles of the building, and a second lift is provided.

The first floor is devoted entirely to electrotherapy treatment. There are three large rooms fitted up as bio-physical units, a number of smaller rooms for various electrical treatments, and linen room, dressing-rooms, consulting room, and an entrance hall and rest room. Staff and lavatory accommodation is general on all floors.

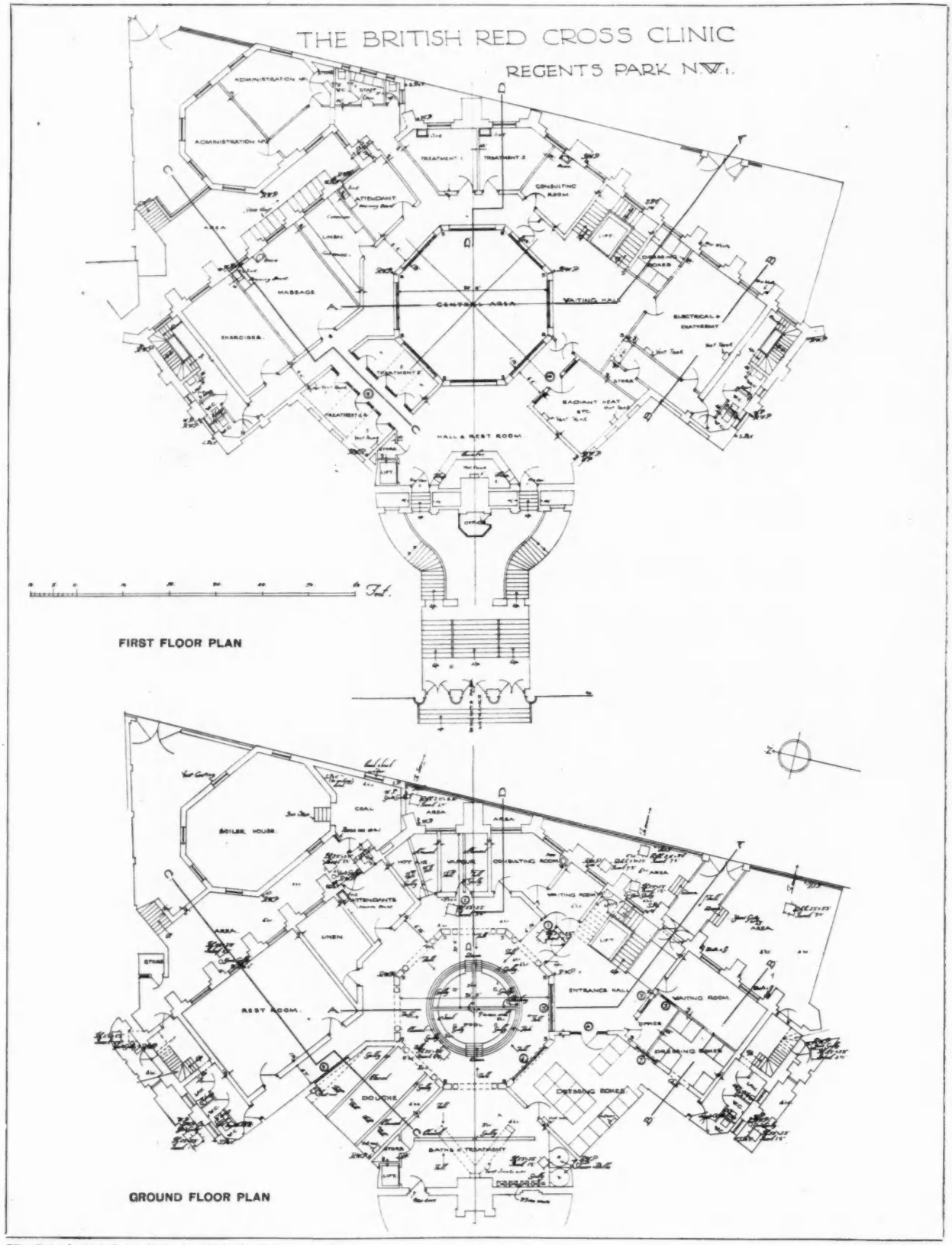
Both the ground and first floors are intended for the treatment of insured persons, from the trade unions, friendly and approved societies, etc., and the clinic has been officially recognized by the Ministry of Health as being a centre to which the various societies may allocate funds for the treatment of their members.

The second floor is a kind of combination of the two lower floors and provides for both treatments. It is intended for the use of private patients who can afford to pay a little more for their treatment. The completion of this section of the work was made possible by the generosity of Sir Otto Beit, who contributed largely to the funds and success of the clinic.

The building is the first of its kind in Great Britain. Abroad, particularly in Germany, similar clinics on a much larger scale exist in many of the large towns, those in Hamburg, Berlin, Vienna and Amsterdam being conspicuous examples. The cost of the building, apart from furnishing and equipment, was about £36,000.

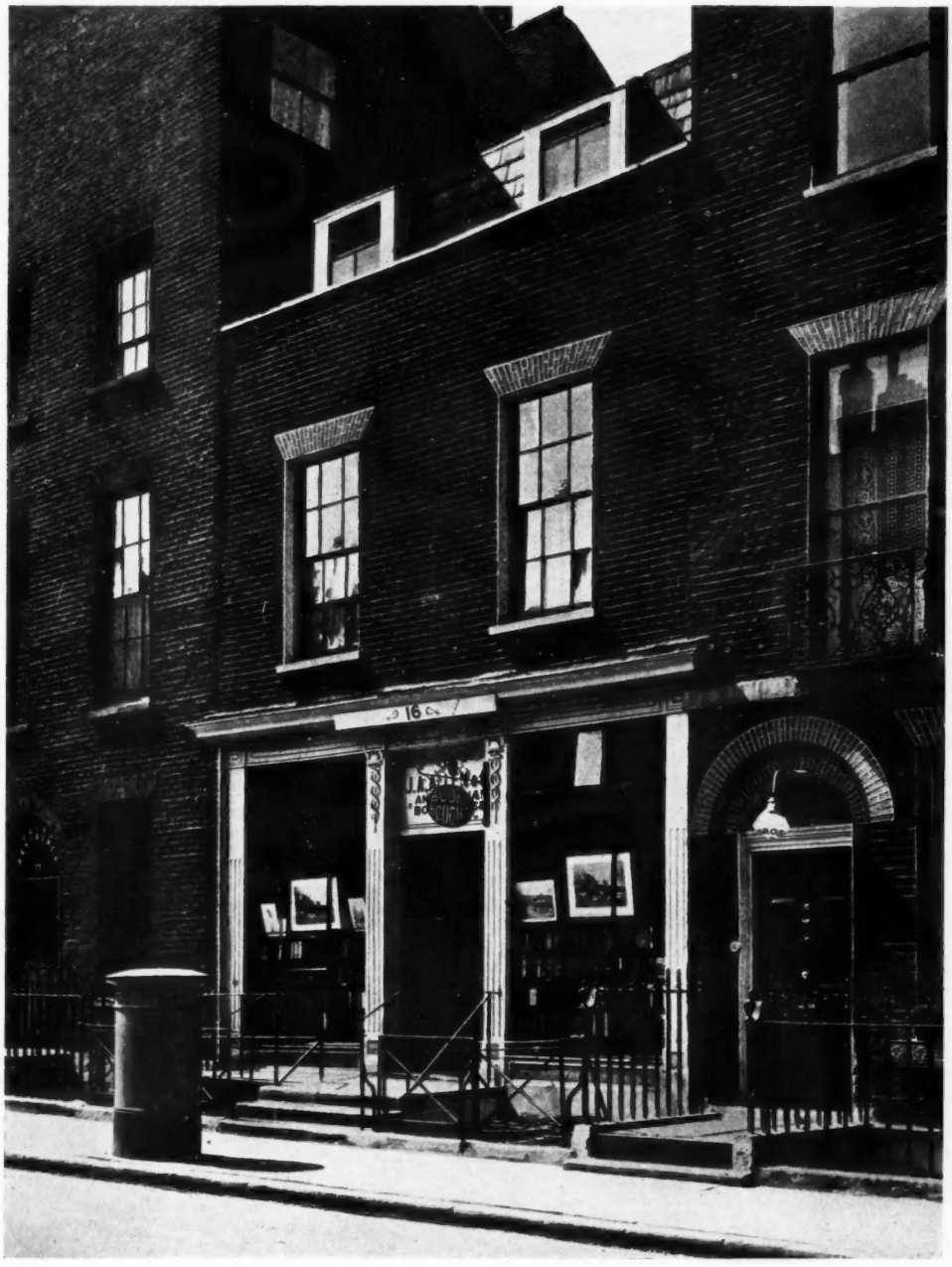


Another view of the central octagon. The pool is divided into three parts, giving baths of different temperatures. Around the octagon are dressing-boxes and rooms for consultation, vapour and hot-air treatment, and for rest. The semicircular-headed doorway leads to the entrance hall.



The British Red Cross Society's Clinic for Rheumatism.] [*By Thomas A. Pole.*

The ground floor is devoted to hydro-therapy treatment and the first floor to electro-therapy. The second floor is adapted for these treatments in combination. It contains all the necessary rooms, bathrooms, pools, etc., and is reserved for the use of private patients.



ENGLISH PRECEDENT No. 116

SHOP FRONT, No. 16 GRENVILLE STREET, BLOOMSBURY, W.C.

It took a long time for the shop to break away from its association with the house. This example, bold in its day, is hung with every emblem of domesticity: small in scale, windows rather for announcement of what is inside than display, and railings round the imaginary forecourt.

It is rather interesting to mark the enriched motifs over the doorway, on the pilasters flanking it, and on the stall board below the windows—all taken from the beautifully engraved books of Roman restorations then current. One imagines it as being what draughtsmen call a "cold crib," for the pilaster flutings are very coarse.

—[E. MAXWELL FRY.]

LETTERS FROM READERS

MODERNISM AND THE MAN IN THE STREET

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The letter from "Quite the Ordinary Man in the Street," published in THE ARCHITECTS' JOURNAL for May 7, expresses an exceptional and not a general point of view. He is fairly answered by your own comment that, if his views were commonly held in this country, the "Modern Movement" would have made more headway than it has.

There are laymen who hold your correspondent's views—I have met one or two myself—but, in my experience, the layman, with a rare exception here and there, would sooner be seen going to his place of business in a burnous or a kilt than be willingly discovered in one of "these new-fangled buildings." I wish I could think otherwise.

JAMES BURFORD

ELECTRIC TRANSMISSION TOWERS

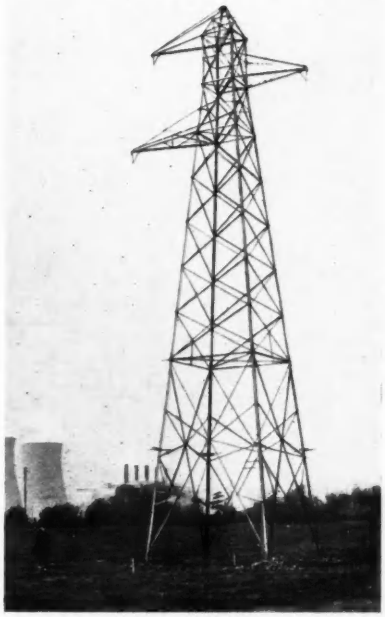
To the Editor of THE ARCHITECTS' JOURNAL

SIR,—In your issue for May 7, page 730, you reproduce an illustration from *The Face of the Land*, showing an extensive landscape with some very obviously faked electric transmission towers and lines defiling it.

Whilst I have every sympathy with the aims of those who would prevent the defacement of the countryside, I feel that nothing but harm can be done to the movement by the publication of such obviously faked propaganda. The towers in the picture are most grossly drawn, are pitched about half the distance apart they would normally be in such a landscape; and the cables, and even the towers themselves, have been drawn in with an inaccurate and exaggerated effect, which achieves nothing but the grotesque. I estimate that the cables shown in the illustration, if properly sketched, would be something like 12 inches in diameter, instead of their actual size, ½ inch or so, which would be quite invisible in the picture.

Honestly, do you consider that if a real transmission line had run across the landscape instead of a faked one, it would have been as noticeable as the railway line in the middle distance? Personally, I think that there can be something very charming about the design of these towers, particularly in the rise and fall of the graceful catenaries as they stretch across the country.

To give you some idea of the proper scale on which the towers ought to have been drawn, I enclose a photograph [reproduced on this page] of



An alloy steel transmission tower at Frodingham, recently supplied to the Central England Electricity Scheme.

one recently supplied to the Central England Electricity Scheme.

F. ROWLINSON,
Publicity Department,
THE UNITED STEEL COMPANIES LTD.

FITTINGS TO ARCHITECTS' OWN DESIGNS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The experience of Astragal's architect informant, referred to in your issue for May 7, page 707, interests me very much because the willingness of the Continental manufacturer as stated by him is not in accord with my experience.

Two years ago, when one of the leading English architects asked me to collaborate with him in the design of the electric light fixtures for a new liner, I wished to incorporate in the fittings pressed glass after the French style, but from my models.

As far as my knowledge went at that time there was no firm in this country with experience of modelled pressed glass, so I approached some French glass-making firms and also some Czechoslovakian firms.

Their replies were practically the same in all cases, viz.: if the work were carried out to my models these Continental firms required from £75 to £100 per mould, a guarantee of 500 pieces supplied from each mould, and a period of six months for delivery.

These terms were not a business proposition, so this type of glass for that boat went by the board. But I determined that I would never again be placed in the same worrying position. So I looked round among the English glass manufacturers for someone with whom I could collaborate to compete against the Continental work. I was fortunate enough to meet Mr. W. G. Riley, who had just come into control of the old-established firm of J. Walsh Walsh, Ltd., and we combined his engineering skill and experience and my sculpture and metalwork experience to turn the glass factory for a portion of its work into new channels. It was lucky we set to work so thoroughly and quickly, for twelve months later a sister-ship required electric light fixtures, and this time decorative pressed glass was requested by the steamship line directors.

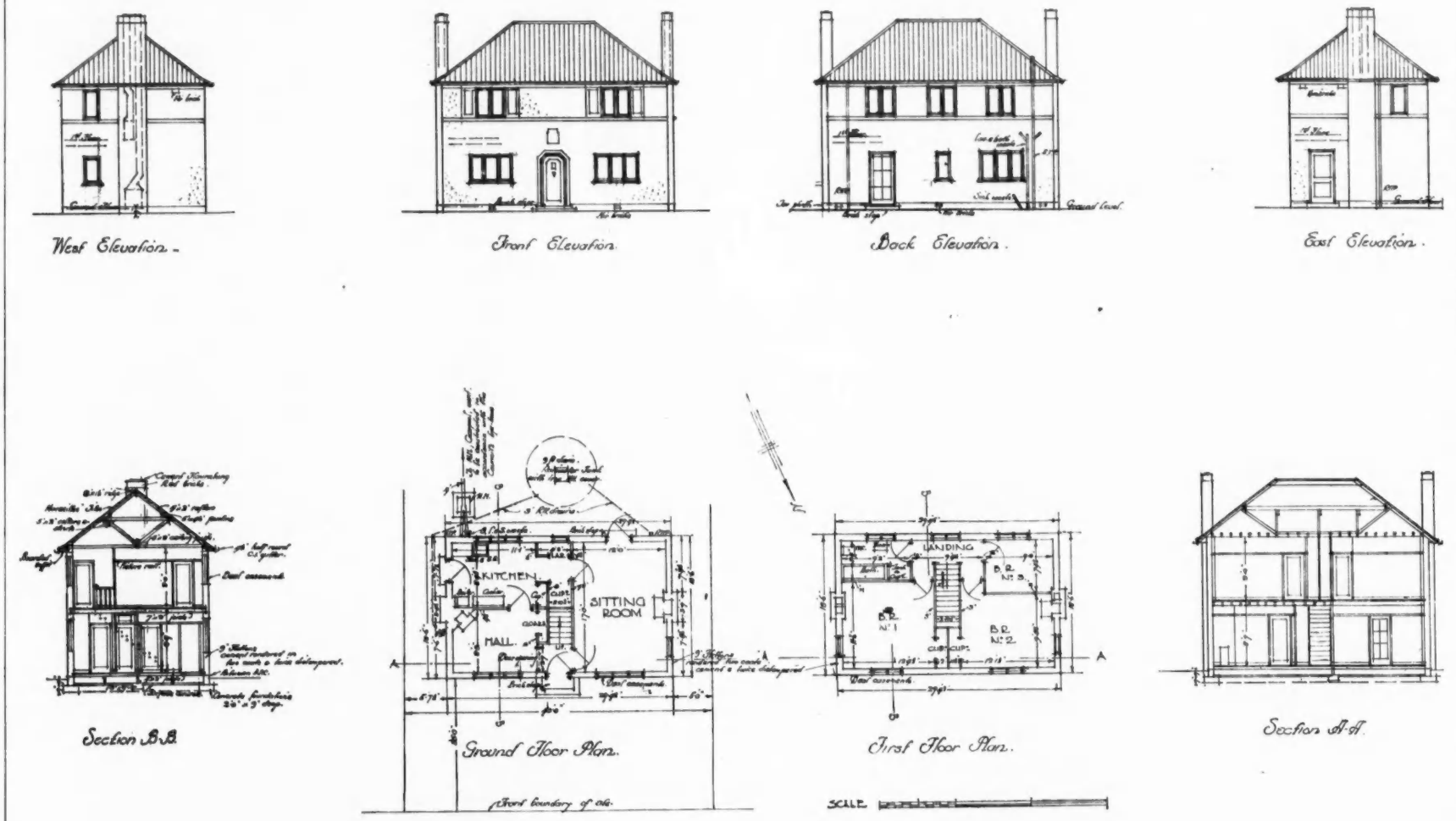
The designs called for some twenty to thirty models involving a similar number of metal moulds. The whole of the cost of these models and moulds was sunk by us in the fittings, which were therefore produced at a commercial price. The work was executed and delivered in ten weeks from date of order, *and* there was only one breakage between the factory and destination on board ship.

But there is still a point Astragal's informant should consider before he is too severe on manufacturers in this country. Architects are very individualistic in their designs. It is not often that they will agree that fittings which suit the expression for one building are in keeping with what they desire to express themselves. So I have some sympathy with manufacturers who hesitate to spend a few hundreds in producing to an architect's design fittings which can only bring them a profitable return if they turn the full efforts of their selling organization in this direction.

WALTER GILBERT

Will a correspondent who writes from Norwich and signs himself "A Pupil" please let us hear from him giving us, in confidence, his name and address. The names of correspondents are not published in THE ARCHITECTS' JOURNAL *unless permission is given by the writer, but no notice can be taken of unsigned letters.*

A number of letters have reached the Editor in connection with the voting for the R.I.B.A. Building Jury. It is hoped to publish a selection of these letters, but they are being held over till next week when the result of the voting will be dealt with in a special article.



House at Holmer Green, Bucks.] [*By Frank T. Winter.*

The plan takes the form of a rectangle, the sitting- or living-room occupying about one-half of the ground floor and running from the front to the back of the house. The remaining half of the ground floor is devoted to the lounge-hall, which is equipped for hats and coats, and the kitchen, and store cupboards. On the first floor are three bedrooms and a bathroom. Gas and electric services are not available at present, and cooking is done by an oil-stove and oven.

AN ECONOMICAL HOUSE AT HOLMER GREEN, BUCKS.

DESIGNED BY FRANK T. WINTER



The entrance front. The walls are covered with stucco and the roof with tiles. Two slightly projecting bands are introduced to form a frieze. This and the front door surround are dark cream, and a plaque of the same colour over the doorway links the two together. The remainder of the wall surface is light cream.

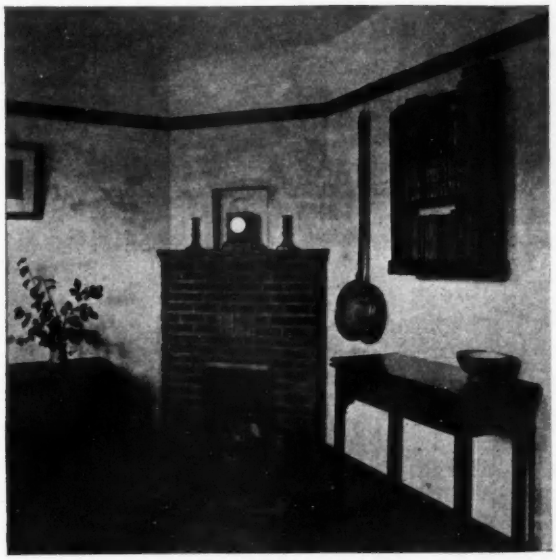
THIS small house has been economically designed, and built within certain definite limits of cost and size. The plan is arranged within a simple rectangle—an important element where economy has to be considered. It includes an entrance lobby, lounge hall, sitting-room, kitchen, and larder on the ground floor, and three bedrooms (two with built-in cupboards), bathroom and w.c., and linen cupboard on the first floor.

In the lounge hall the furniture is antique and well suited to the character of the room. The sitting-room is 17 ft. by 12 ft., and runs from the front to the back of the house, and has a French door leading to the garden.

An independent boiler provides hot-water service to the various fittings. Gas and electric light services are not at present available, but a supply of water is taken from the company's mains, in addition to a soft-water supply from a rainwater well.

In designing the exterior an attempt has been made to give distinction to an otherwise plain building. Two horizontal bands are introduced to form a frieze, which is linked up with the front entrance by a plaque above the doorway. The horizontal treatment is further emphasized by shutters to the first-floor windows. The two external chimney-stacks are carried up quite plain in stucco and finished at the top with a course of red bricks on end.

The cost of the house worked out at approximately £600.





The fireplaces in the lounge hall and in the sitting-room. The former is in 6 in. by 2 in. multicoloured, sand-faced bricks, and tiles, and has an armour-bright rim and fret. That in the sitting-room is in similar bricks and flat ½-in. tiles. A touch of colour is introduced by a small panel of Delft faience tiles.

QUESTIONS THAT ARISE

ARCHITECTS' CLAIM FOR SCALE FEES

"Architect" writes: "*In 1919 another practitioner and myself were appointed joint architects to carry out the housing scheme for an Urban District Council, and the minute governing the appointment stated that we were to be remunerated on the terms of the R.I.B.A. scale.*

"*Our appointment was not confirmed by a sealed agreement, and the minute of the Council is the only evidence of our engagement. Since our appointment we have been responsible, up to now, for the development of land and erection of nearly 600 houses.*

"*Will the absence of a sealed agreement preclude our suing the Council for fees based on the R.I.B.A. scale, or will we be obliged to accept the reduced scale of fees issued periodically since 1919 by the Ministry of Health? These Ministry fees were never communicated to us, and we were not asked at any time to adopt them.*"

I have no information in the papers now before me as to whether the Urban District Council referred to has erected the houses by virtue of the powers conferred on them by the Housing Acts.

If it be assumed that the houses were so erected, what is then the position of the architect who, in the case now before me, was appointed by the Council to undertake the work, at a remuneration which was to be in accordance with the scale of fees prescribed by the Royal Institute of British Architects, but no contract under the common seal of the Council has been executed?

I am clearly of opinion that if the architect sued for his fees he would be met with a plea that the contract was unenforceable by virtue of section 174 of the Public Health Act, 1875, and further in my view, and I am clearly of opinion, that the defence would succeed, and that the architect would fail on his claim for any remuneration over £50, whether it be the R.I.B.A. scale of fees, the Ministry of Health's scale, or any scale whatsoever.

The matter is so important that it is proposed to explain fully the reasons for the conclusions at which I have arrived.

Section 174 of the Public Health Act, 1875, is as follows: "With respect to contracts made by an urban authority under this Act, the following regulations shall be observed; namely (1) Every contract made by an urban authority whereof the value or amount exceeds fifty pounds shall be in writing and sealed with the common seal of such authority."

It will be observed, therefore, that if the contract falls within section 174 of the Public Health Act, 1875, it is not enforceable if it exceeds £50, unless the contract is in writing and is sealed with the seal of the Council.

The question, therefore, is whether the formalities set forth in section 174 of the Public Health Act, 1875, apply to contracts entered into under the Housing Acts.

The Court of Appeal in the case of *Nixon* v. *Erith Urban District Council* (1924), 1 K.B. 819, held that section 174 of the Public Health Act, 1875, governs contracts entered into by urban district councils under the Housing Acts.

The Courts do not like extending section 174 of the Public Health Act, 1875, to other Acts so as to enable urban district councils to escape from paying their debts unless the Acts state clearly that the provisions of section 174 of the Public Health Act, 1875, are to apply. (*Lawford* v. *The Billericay R.D.C.* (1903) 1 K.B. 772, and *Douglas* v. *Rhyl D.C.* (1903), 2 Ch. 407.)

If the Council erected the houses under the powers contained in an Act to which section 174 of the Public Health Act, 1875, does not apply, I am asked to advise as to what scale of fees should be paid to the architect.

In my view the R.I.B.A. scale would apply, as it was the scale of fees mentioned in the "verbal" agreement.

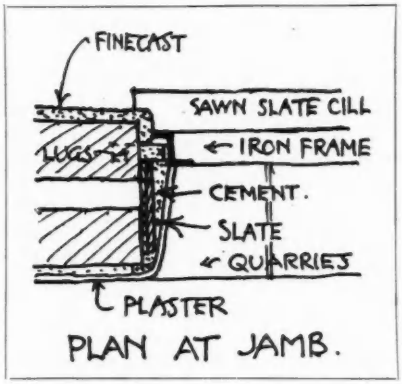
In the absence of data before me I am unable to form a final opinion as to whether or not the houses were erected under the Housing Acts, but I feel suspicious that they were, and if this is so in fact the architect cannot recover more than £50.

It is assumed that the Ministry are unaware that the contract was never put into writing and executed under the common seal of the Council, otherwise in my view they would refuse to make any offer.

The architect would be well advised to consider any offer over £50 he might receive. E. F. I.

STANDARD CASEMENTS AT THE SEASIDE

A. H. G. writes: "*Is there any objection to fixing steel-frame casement windows of the modern type in seaside houses, direct into the brickwork? I am contemplating house-building (for myself), and am told here that in the position indicated—about 150 yards back from the sea, facing south (i.e. towards sea)—such windows, even of the very best quality, are useless, as they always let in rain in heavy weather, with rain and wind, if fixed directly into the brickwork.*"



PLAN AT JAMB.

I have used ordinary standard cottage casements in several houses in exposed seaside situations, built in directly to brickwork, without any trouble whatever from rain penetrating the jambs. Hollow walls were used, the jambs built up solid with a vertical slate dampcourse dividing inner and outer skins, and the external face was finecast and distempered (see sketch).

The important point to observe is, I think, that the metal frames should not be built in so close to the jambs that no joint-filling material can enter. I arranged a space of about ¾ in. at the jambs, into which the external rendering was turned, and had the internal jambs undercoated in cement as a slight splay, so that this internal rendering also entered the space, meeting the external coat. As a general principle, where any form of cement joint must be formed, let it be never less than ½ in. to ¾ in. The arrangement described also prevents the casement hinges from being buried in the external rendering. E. G.

Building Practice Today

THE SPECIFICATION WRITER is the title of a department which, from next week onwards, will make its regular fortnightly appearance in THE ARCHITECTS' JOURNAL. The Editor, in deciding to create this permanent section, has been influenced by a view which is heard expressed more and more often nowadays. According to this view the modernization of building methods has gone ahead more rapidly on the drawing-board than it has in the written document. But all buildings have to be described as well as drawn. Notes and figures have to be added to the sheets of drawings. Constructional methods have to be worked out; materials and processes have to be specified. The practical man who does all these things will find the SPECIFICATION WRITER department his most valuable aid.

HOW WERE THE PYRAMIDS BUILT?

BY D. DAVIDSON

Last week's extracts from his paper, "Pyramid-building Problems: Man-power Organization, etc.," recently read before the Institution of Structural Engineers, carried the author's argument as far as establishing the total time and yearly progress of building the Great Pyramid. Upon these and other considerations an interesting conclusion as to the method of raising the stones is now based.

OUR investigation at this stage has introduced us to the pyramid problems of supply and demand. Our sole means of investigating the rate of supply is to study the evidence of the rate of demand. This evidence is provided by the ascertained levels in pyramid building attained in each successive year's work of building.

Examples worked on this basis show why ten years had to be devoted to preliminary work before the actual building work commenced. The same comparative rate for quarrying as for building to the height stated—the blocks being the same in both cases—would give all the blocks for the pyramid quarried in eight and a-quarter years. The preliminary period of ten years, mentioned by Herodotus, therefore seems to be ample for the quarrying of the masonry for the Great Pyramid. This would mean that the majority of the skilled masons and other artificers who were later barracked on the Pyramid site could be employed to advantage in the quarries before the actual building operations began.

Sir Benjamin Baker came to the conclusion that Herodotus' statement of 100,000 men for three months in the year for ten years was quite reasonable for quarrying the blocks and getting them across the Nile.

The limestone quarries from which all the blocks for the Great Pyramid were taken are situated on the opposite bank of the Nile from the Gizeh plateau on which the Great Pyramid stands, and are about seven miles up-river from the latitude of the Great Pyramid. The stones were transported across the Nile on barges or rafts at the time of the inundation, when the river was five miles wide.

Petrie states that it is likely that a year's supply of stone would be kept on hand at the Pyramids, on which the masons would work. . . .

"What the number of skilled masons was we may well guess from the accommodation provided for them in the barracks behind the Second Pyramid. These barracks were used by the workmen of Khafra; but those of Khufu must have been equally numerous and have occupied a similar space, if not, indeed, these identical buildings. The barracks would hold 3,600 or 4,000 men easily, and as about 120,000 average blocks were required to be prepared every year, this would be only one block of stone prepared in a month by a party of four men, which would probably be the number of masons working together. Hence this accommodation is really more than enough; and most likely a good deal of lifting and building work would be going on throughout the year, beside the supply of labour during the inundation."

Our next problem concerns the actual building work on the Great Pyramid. There were approximately 2¼ million blocks of stone, and the approximate total weight was 6 million tons. Our investigation has shown that this gigantic mass of masonry was built in twelve years. How was this done? The popular theory, for more than 2,000 years, has been that an inclined embankment led up to the Pyramid, and was heightened as the Pyramid was raised. Sand, of course, could be the only material available at Gizeh for such a colossal road embankment; but a single sandstorm—a phenomenon normal to Egypt—would destroy in an hour the labour of months or years. Apart, however, from the latter consideration, any earth-embanked roadway would need to be at least 20 ft. wide, and would require side slopes of at least two horizontal to one vertical. It would be useless to construct a roadway of this description at a steeper gradient than 1 in 7, and the road surface would require to be paved, after ample time had been allowed for embankment settlement. The latter requirement alone would require the road surface to be taken up, the embankment to be raised, allowed to settle, and the road surface relaid for each successive stage of the Pyramid's building. Let us, however, dismiss these objections to see what result the embankment theory achieves when carried logically to its illogical conclusion.

To serve its purpose the roadway would have to be at least 350 ft. high at the Pyramid. It would have to approach from the east, and its north side slope would overflow the cliff edge of the Gizeh plateau, to the sandy plain 100 ft. below. The north slope of the road embankment would therefore extend 900 ft. horizontally northwards, and the south slope on the plateau would extend 700 ft. southwards, giving nearly one-third of a mile for the cross-sectional base width of the roadway. Both side slopes would also overflow along the north and south slopes of the Pyramid unless colossal wingwalls were provided to retain them.

At the base of the plateau, on the side of approach from the east, the roadway would be at least 190 ft. high, with a cross-sectional base width of at least 780 ft. The roadway would be at least half a mile long, and the work required to build the road embankment by native labour, and to quarry, transport and build the blocks into the Pyramid, and then to demolish the monumental roadway, that buried the Pyramid and its environment, would occupy the whole period of sixty-three years that Manetho ascribes to the reign of Khufu. This is the single merit that the embankment roadway theory of building possesses—namely, that it agrees with the impossibly long reigns that Manetho gives for the Gizeh Pyramid kings. The fact that the Pyramid masons tipped all their chippings over the edge of the north cliff of the Gizeh plateau, however, proves that no inclined earth embankment was ever built; since these chippings could not have been tipped there if the embankment had existed during the construction of the Pyramid.

In thus dismissing the embankment roadway theory of building we must not, however, assume that we have dismissed the possibility of building by means of inclined planes.

All the known evidence shows conclusively that the ancient Egyptians always employed manual labour, and adopted the simplest of mechanical principles, in moving and lifting enormous masses of stone—masses frequently considerably heavier than any known masses in the Great Pyramid. The evidence is also conclusive that they never adopted other than the simplest of mechanical devices as aids to human labour. These comprised the principle of the lever, the use of skids or sledges, and the principle of the inclined plane.

The majority of the blocks in the Pyramid's masonry courses weighed between 2 and 3 tons. The heaviest

block in the base course does not exceed 20 tons. Several other deep courses may have contained some blocks as heavy as 10 to 14 tons, but the greater number of stones were under 5 tons in weight.

Professor John Goodman has written : "Most of the stones do not exceed 2 to 3 tons each. These could easily be carried by gangs of labourers. I saw stones carried in this way at the Assuan Dam, and Sir Murdoch Macdonald told me that 5 tons was about the limit. It is impossible to get sufficient men on to one block for greater weights.

". . . There are many places on the sides of the rocky plateau on which the Pyramids are built where the rock is worn smooth in wide grooves up the face of the cliffs—and which were probably the places where the stones were hauled up."

The latter statement quoted shows us that if the blocks were hauled up the cliffs they could have been hauled up the sides of the Pyramid as easily on suitable temporary skid-ways or haulage ramps laid at an even gradient ascending across the Pyramid's face slope.

"There is, however, quite a different problem," continues Professor Goodman, "in lifting the big granite blocks over the King's Chamber—about 50 tons each. These, I think, as Petrie points out, were rocked up. On these blocks there are marks of four lugs. The lugs have been cut off, but the ring marks of the trepanning drills are there, evidently made when the stone was in the rough. The surrounding stone was cut away, leaving the projecting lugs. As the blocks were tilted on these lugs (acting as fulcrums) bronze wedges were inserted under the other two lugs, again tilted, and so on. On one occasion Petrie and one man in a few hours lifted (in this manner) a block weighing 8 tons sufficiently for Petrie to crawl under and examine the chisel marks. If these lugs were not used for this purpose, what were they for? Of course the lugs were chipped off when the block was got into position."

What Sir Flinders Petrie has to say in this relation should prove helpful. In his *Arts and Crafts of Ancient Egypt;* he states as follows :

"Where stones needed to be raised for a pyramid or a pylon, some staging was required. Remains of a massive brick slope still stand against each face of the unfinished pylons at Karnak. This, however, is only the general mass of the staging, and the actual steps for the stones must have been of stone, as brick would crumble to powder if any lifting work was done directly upon it.

"For short blocks a cradle of wood was used, of which many models have been found in foundation deposits along with model tools. On tilting this to one end, and putting a wedge beneath it, it could be rocked up the slope, and so gradually raised, first to one end and then to the other. For large blocks, the actual lifting was probably done by rocking up. If a beam be supported by two piles near the middle, a small force will tilt it up clear of one pile; on raising that pile the beam may be tilted the other way, and the lower pile raised in its turn. Thus rocking from pile to pile, a beam can quickly be raised till it is high enough to be moved on to the next step. It was probably thus that the fifty-six granite beams, weighing over 50 tons each, were raised in the Pyramid of Khufu."

While it is possible that the application of the principle of the inclined plane, here noted by Petrie as adopted in erecting pylons at Karnak, may have been adopted in some form or other in building the Great Pyramid, it is impossible to conceive the 2¼ million blocks of the Pyramid being raised by the laborious process of rocking up described. This process might suffice to raise the Pyramid in the sixty-three years that Manetho ascribes to Khufu, but would not suffice to raise it within the twelve years' period established by our investigation.

We have seen, then, that two methods are on record as to how the ancient Egyptians raised stones to a height. By one method they raised the stones, both large and small, by alternately rocking and wedging them up. By the second method the heaviest masses of stone were dragged up an incline. For both methods recorded, temporary inclines were provided. The first of these methods would not have sufficed to raise the Great Pyramid within the known reign of Khufu. We are, therefore, limited to the methods of raising by carrying the blocks up temporary inclines or of raising the blocks by dragging them up temporary inclines.

For carrying up, the load, as we have seen, is limited to 5 tons. Many blocks in the courses of masonry up to over half height were of greater weight than this, although the majority of blocks throughout the Pyramid vary in weight between 2 and 3 tons. In the fourth year's work of building there were many blocks over 10 tons in weight, although the average block for this fourth year's work was 4 tons. The laying of the latter heavy blocks —in the thirty-fifth course of masonry, which is 4 ft. 2 ins. deep—completed the building of half the Pyramid's weight during this fourth year of building.

Again, the blocks over 5 tons weight are so sufficiently numerous that to have rocked them up the temporary inclines or even up the courses would have too frequently broken the sequence of lifting or hauling the lighter blocks up the temporary inclines. There is an exception, however, in the case of the larger granite and limestone beams over the King's Chamber. These were only fifty-five in number, and each weighed over 50 tons. The evidence cited by Professor Goodman is conclusive that these huge beams were raised by rocking. From this two facts emerge. One is that the rocking up of only fifty-five blocks could be organized so as not to disorganize more than one or two haulage routes temporarily out of many haulage routes for the blocks of the courses. The other fact is that the gradient for these routes was considerably steeper than the 1 in 20 gradient required for the raising of the colossi of Ramessu IV, as otherwise our roofing beams could have been hauled up the routes for the blocks of the masonry courses.

We cannot logically conclude that blocks from 1 to 5 tons were carried up the same inclines as those provided for dragging blocks from 5 to 15 tons. Nor can we imagine separate inclines for carrying and separate inclines for dragging. We can only logically conclude that all the blocks for the masonry courses were dragged up inclines of a gradient considerably steeper than 1 in 20. The reason for a flat gradient not being adopted is obvious. A flat gradient would have "cork-screwed" too many times in ascending round the Pyramid's side slopes. Now, the angle of repose of limestone on limestone gives a gradient just under 1 vertical to 2 horizontal. On this account, and on other accounts, this is too steep for rapid and economical haulage by manual labour. Again, any gradient flatter than 1 vertical to 4 horizontal unduly crowds together parallel ascending routes when successive arris edges are turned by these parallel routes. Every time the routes turn a right angle from one face slope on to another the routes are drawn closer and closer together.

With a gradient of 1 vertical to 4 horizontal, a route starting at a base corner of the Pyramid had traversed the half width of one face slope of the Pyramid when it had attained the height for laying the thirty-fifth course of masonry, with the laying of which course half the weight of the Pyramid had been built. The same route reached the first arris edge at one-third total Pyramid height, at which height seven-tenths of the Pyramid's weight had been built, and one-half of the total human energy necessary to build the Pyramid had been expended. This was at the base level of the sixtieth course, the level at which the first series of massive roofing beams over the King's Chamber were laid, and

also completed the sixth year's work of building. The same route, continued, reached the second arris edge at 0·56 total Pyramid height, completing nine-tenths of the Pyramid's weight, and four-fifths of the total human energy. The same route, continued, performed a complete circuit of the four face slopes of the Pyramid at four-fifths the total Pyramid height. At this level 0·99 of the total Pyramid weight had been built.

The route taken as an example is only one of many parallel routes that would be laid temporarily, beginning from each base side. The width of the lowest stage of a route—before it turned the first arris edge—would be fixed by the width required to drag the widest block for that stage. The same would hold for the next stage, and so on. The width of the lowest stage would therefore determine the maximum possible number of routes that could be built. The narrower they could be, the less masonry, or other material, would be required to build them.

The probable provisions, as I have outlined them, suggest that the best means of dragging for human labour would be provided by a shoulder and torso harness for each labourer so that the effort would be part lift and part pull. This method of organization would require a sledge to carry the stone, skids up which the sledge would slide, and treads of shallow steps on both sides of the skid-way for the labourers. The sledge would require to be open on the haulage end, but would need to be provided with high sides and back; and precisely such a sledge is shown on the illustrations, from the Pyramid period, of sledges for conveying stones. Rope, stone, and gypsum, for bedding and jointing, were the three materials that Egypt provided in abundance.

Other materials for construction had to be imported. The inclines were, therefore, probably of mud brick cores with stone paving, and one retaining side of stones built on the courses. It is obvious that this means the casing stones had to be laid when the core masonry courses of the Pyramid were laid; as otherwise the original temporary haulage routes would have had to be demolished to permit the laying of the casing stones, and a second series of temporary haulage routes would have had to be laid to build the casing. For the casing stones to provide a grip or bed for the temporary haulage routes, they would require to be left stepped or rock faced. This is the manner in which the casing stones of the Third Pyramid of Gizeh were built, since many of the granite casing stones of this pyramid are still left rock faced, showing the original surfaces of the water-worn granite boulders from which they were cut.

With this method of building, the demolition of the temporary haulage routes would begin from the top downwards, the casing sides being dressed to a smooth surface as the covering haulage routes were removed. This is in accordance with the account given to Herodotus. Herodotus states that "The upper portion of the Pyramid was finished first, then the middle, and finally the part which was lowest and nearest the ground." This, it will be observed, gives three stages of demolition of temporary work and finishing off of permanent work. Now, the average number of stages for all temporary haulage routes at our gradient of 1 in 4 is precisely three.

We have not yet succeeded in proving, however, that the 2¼ million blocks of the Pyramid could be hauled up the Pyramid and built in twelve years. The haulage problem is best approached by studying the building problem. From the level of each year's work and the depth of the courses we can obtain approximately the total number of stones that had to be laid in each year. I have divided the work into levels of twelve successive years, and for analysis have taken stages of two years. The completed square area of the first year's work of each stage of two years' work I have taken as the average bedding area for the two years' work. I have divided this area into squares of equal area in which one block had to be laid per hour to build the ascertained number of blocks in two years. For the first two years' work this method gives one block laid in a square 81 ft. by 81 ft., and in the last two years' work, in which the blocks were of considerably less weight, one block was laid in a square 35 ft. by 35 ft.

These figures are based on a working year of 300 days, and a working day of 10 hours, which I have adopted merely for purposes of comparative analysis. The data disclosed by the analysis show that the building work could be done even in a quarter or a third of the time allowed, providing that the haulage organization could supply the blocks.

In the first two years' work seventy-six blocks, averaging 4½ tons, had to be supplied per hour; and in the last two years' work fifty-seven blocks averaging 1½ tons had to be supplied per hour. From two to four of the latter blocks could be dragged in a single sledge. I have shown that the bulk of the problem of haulage lies in the lower stages. From the standpoint of the number of blocks supplied per hour, the first two years' work is the worst. If we take six haulage routes per side or twenty-four for the whole circuit of the Pyramid, the available width for the construction of each inclined roadway is about twenty-five. The road need not be so wide as this, since the builders would have to consider economy in building up the retaining wall side between parallel routes.

This layout of temporary routes for lower stages would give slightly more than three blocks per hour per route supplied for building. More and narrower routes could be supplied with less expenditure of material. From all of which it is obvious that, even if my working year and working day are considerably reduced, the work of haulage could supply the builders with material that the builders could lay, within the twelve years' building period established by this investigation.

(*Concluded*)

A Plea for Wood Carvers

Mr. H. E. Taylor, General Secretary of the London Cabinet and Upholstery Trades Federation (Employers), and Mr. B. Rockman, London Secretary of the National Amalgamated Furnishing Trades Association (Operative Carvers), write to us as follows: "May we ask for a little of your valuable space to call attention to the enclosed copy of a letter which is being sent out to a considerable list of appropriate addressees?

"It is certainly no part of our mission to decry the beauty and simplicity of twentieth-century furniture and architectural work, which relies for its undoubted charm and effectiveness on applied rather than incised ornamentation. It would surely be as grievous a mistake, on the other hand, to regard all carving as merely 'dust-traps' (involving unwarranted extra labour) as it would be to condemn it merely because an earlier and more leisurely generation gave it too much prominence."

The letter enclosed reads as follows:

DEAR SIR,—We venture to appeal for your assistance in a matter which we are sure cannot fail to strike a responsive chord.

Owing partly to general industrial conditions, but even more to "changes of fashion," unemployment among wood carvers is exceptionally heavy at present. This is not only serious to these men (and their families) personally, but also from the point of view of their skill in an ancient and honourable craft.

It would surely be most regrettable if, owing to lack of opportunity, these men's "hands" should "lose their cunning."

We ask you, therefore, as we are asking furniture manufacturers, to consider the propriety of endeavouring, wherever possible, to introduce *some* wood-carving, at any rate, into any schemes on which you are engaged, to which it would be appropriate.

Thanking you in anticipation of your most valued assistance,

(Sgd.) H. E. TAYLOR,
General Secretary, London Cabinet and Upholstery Trades Federation (Employers).

(Sgd.) B. ROCKMAN,
London Secretary, National Amalgamated Furnishing Trades Association (Operative Carvers).

THE SKETCH CLUB: THIRD SESSION

"The Academy has come and (with this session) goes—long live the Academy!" Such is the cry that may be heard wherever SKETCH CLUB *members congregate today. With characteristic enterprise they are preparing a special entertainment for their next session. An important item is to be a competition which can best be described in the words Shakespeare puts into Falstaff's mouth in praise of sherry: "It ascends me into the brain." To disclose more at the present moment would be decidedly impolitic.*



The Church of Saint Christopher, Cove, Farnborough.

THIS building shows the influence of the Continental modernist school. In particular its fenestration has the characteristics which may be expected of it, for whereas, in the architecture of past ages, the designer always strove to balance the vertical and horizontal emphasis so that neither obtruded itself at the expense of the other, it seems to be one of the distinguishing marks of modernism that the emphasis is either markedly vertical or markedly horizontal. Here the architects have plumped for verticality.

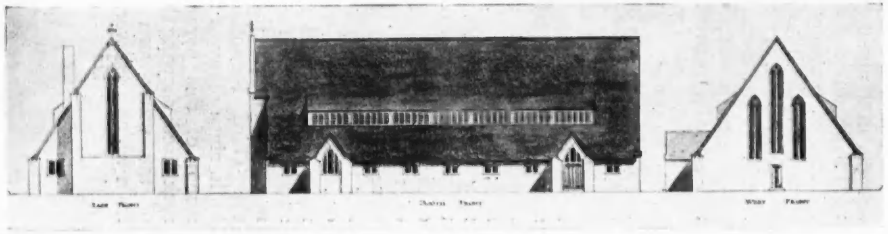
By Herbert O. Ellis and Clarke [R.A. Exn., No. 1360.]

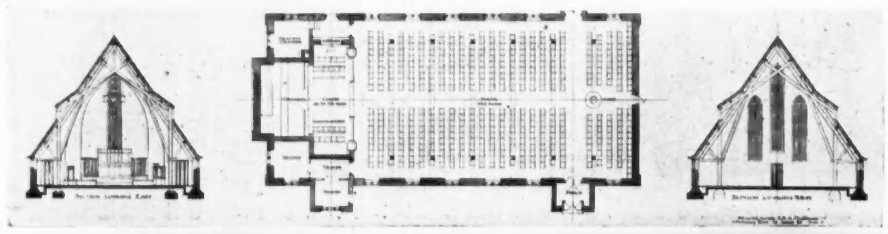
IT is a somewhat strange twentieth-century development that commercial buildings frequently have towers or spires, while churches which, according to the convention of former days, were adorned with these emblems of architectural state, are now, as often as not, designed like plain barns. Accepting this condition, indicative of modern economic circumstances, Messrs. Curtis Green and Partners have devoted themselves to the task of making the barn look interesting. To impart interest to the barn was not, however, sufficient, for it was also necessary to give it an ecclesiastical air. The often-quoted dictum that if we allow the plan of a building to find logical expression the correct architectural character will result may be a true guide in the design of a factory, but it does not suffice for a church; for an ecclesiastical hall need not differ in shape from many other types of hall used for public assemblage. Therefore the architect must resort to symbolism. The symbol of the spire, now being fast corrupted by misuse, was in this instance abjured, perhaps for economic reasons. The employment of lancet windows, however, reminiscent of church architecture of the past, helps to create the religious association here needed.

By W. Curtis Green, A.R.A., and Partners. [R.A. Exn., No. 1385.]

The composition is vigorously conceived and the lateral façades of repetitive design have a pleasing simplicity. The arcade on ground-floor level provides a satisfactory base to the building, while the plain top without a cornice, bald though it may seem, is in keeping with the rectilinear shape of the tower itself. This latter feature, by virtue of which the building takes full advantage of the corner site, gives to the design a slightly ecclesiastical air, which was probably far from the intention of the building owners.

Northcliffe House, Sheffield.

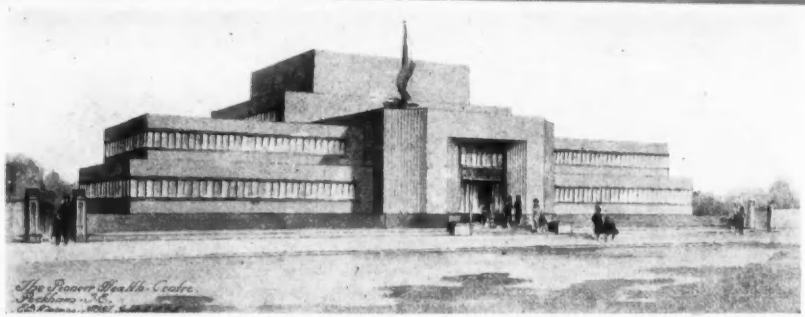






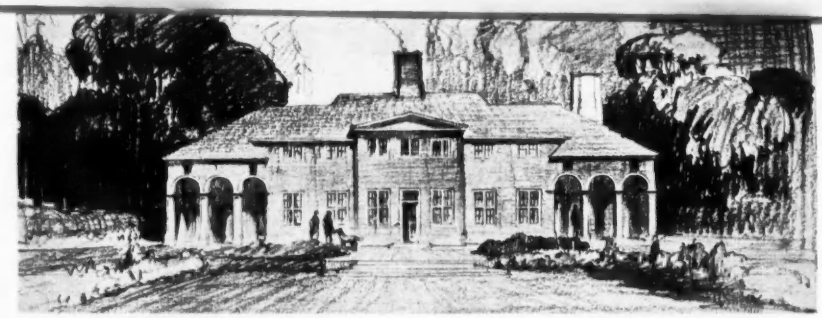
The Pioneer Health Centre, Peckham, S.E.





The Pioneer Health Centre, Peckham, S.E.

By E. B. Musman. [R.A. Exn. No. 1275.]

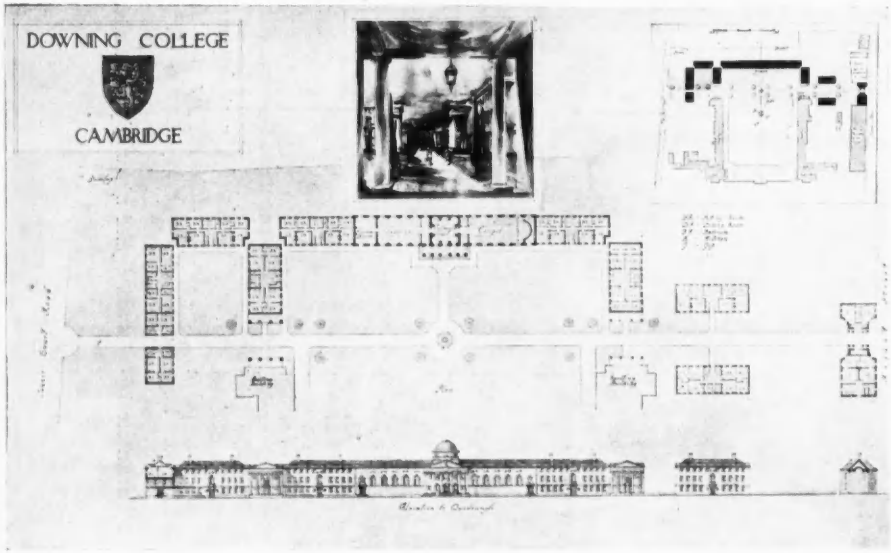


House at Esher, Surrey.

By Oliver Hill, [R.A. Exn. No. 1460.]

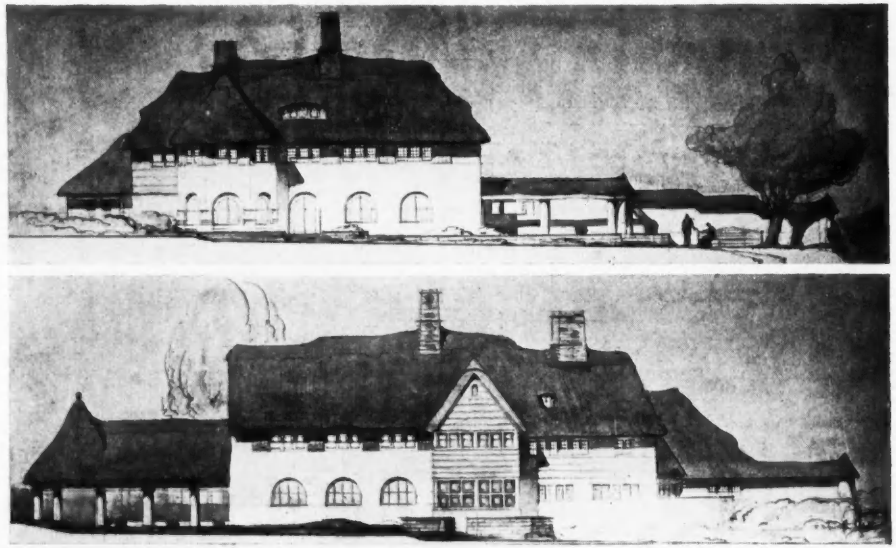
WHEN architects have discovered, or think they have discovered, a new principle of design, it is just as well that occasionally the principle should be carried to extremes, for by this means we are better able to judge of its validity. The long, continuous window, without any apparent vertical supports to the wallage above, is becoming very much the fashion these days, as is also the window which goes round the corner of a building. The result, here, in which both of these expedients are seen to be exemplified, is worthy of critical study.

A GARDEN elevation to a fairly large house provides an excellent opportunity for attractive architectural treatment, especially when the client decides to incorporate a loggia in the house. In this case the loggias, being in duplicate, take their place harmoniously in a symmetrical façade, to which they impart interest and breadth of scale. The layout of the garden, with its spacious lawn and the trees in the background, suggested in Mr. J. D. M. Harvey's rendering, are necessary to the pictorial effect desired by the architect.



Downing College, Cambridge. [R.A. Exn. No. 1379.]
By Sir Herbert Baker, A.R.A.

THE English collegiate tradition represents one of the finest architectural achievements which this country can show, and it is especially remarkable in that it belongs to both the Gothic and Classic periods. It is surprising therefore that this tradition, so clearly defined, should constantly be ignored in modern work both in Oxford and Cambridge. At Downing College, however, Sir Herbert Baker has designed a range of buildings which can be harmoniously associated with the existing college. Here the Classic convention is successfully employed and the long façades have a suavity and an air of restfulness peculiarly satisfying.



Two thatched houses at Worplesdon and Gifford. [R.A. Exn. No. 1449.]
By Philip D. Hepworth.

THESE houses, so similar in style that they deserve to be neighbours, show that thatched roofs, which in former days were generally employed in cottage work, can quite suitably be used in larger habitations intended to be set in a rustic environment. In these charming designs the character of the thatch is admirably brought out in the shapes of the roofs themselves, which have a softness of outline exactly suitable to the material. It will be observed also that the façades have the interest which is derived from contrast: the ground-floor or "reception" rooms are well differentiated from the bedrooms above.

LITERATURE

CHURCH AND CASTLE BUILDINGS IN THE MIDDLE AGES

THE latest volume of *The Cambridge Mediæval History* contains an important chapter on ecclesiastical and military architecture, the twin sections of which have been written respectively by the Dean of Norwich and Professor Alexander Hamilton Thompson, of Leeds University.

Dr. Cranage gives a compact and scholarly architectural epitome of the period in which "the principles of arcuated construction, so long groped after, became understood," and Gothic emerged out of Romanesque. Indeed, his only serious omission in a survey which ranges from Portugal to Cyprus and Trondhjem to Cefalù is in regard to those magnificent brick Gothic churches of the Baltic seaboard, like the grandly austere Marinekirche in Lubeck (the largest vaulted brick church in the world), summarily dismissed as "barn-like," which have had such a marked and wholesome influence on the design of modernist churches in Germany and Scandinavia. It is humbling to our own civilization to read that the Black Death and the Wars of the Roses, which synchronized with the erection of some of the finest English parish churches, caused less interruption of building activity than the late "war to end war."

Professor Thompson gives an absorbingly interesting account of the evolution and decay of the mediæval castle. The first English castles, properly so called, were built by Norman favourites of Edward the Confessor to overawe their Saxon neighbours, and represented an entirely alien type of military engineering. The old Anglo-Saxon *burhs* were simply either moated and palisaded rallying points for communal defence, or garrisoned centres of population; while the Danish *geweorcs* were entrenched base camps and ship-repairing depots situated on the banks of tidal rivers.

The private fortress was unknown until well into the tenth century. It was the logical, as well as the structural, expression of the rise of feudalism, and the symbol of that domestic anarchy which it was the hardest task of a feudal monarch to suppress. By a typical transference of meaning from the abstract conception signified to a concrete object identified with it, of which etymology furnishes many examples, the French term *donjon*, like the English word "dungeon," is derived from *dunio*, a Late Latin corruption of *dominio* = overlordship, the liege suzerainty of vassals.

The earlier form of Norman stronghold, known as the "motte-and-bailey" castle, was a wooden tower ("bailey") standing on an artificial mound (*motta* or *motte*), surrounded by a stockade which constituted its outer line of defence. After square stone towers were adopted it was found that their blind corners offered vulnerable points for mining and escalading attacks. Thus the rectangular *donjon*, or, as it was afterwards called, the "keep," gave place to a circular or elliptical strong point. Next, the curtain wall, formerly only an outwork, became the main defensive bulwark, and was transformed into a ring of projecting towers linked by a continuous parapet from which the besiegers could be enfiladed in every direction. Later still, the *donjon* was superseded by a heavily fortified gatehouse, whence "missiles as effective as, and more economical than, the molten lead of popular fiction" could be rained on assailants. With the concentric castle—a type of plan largely copied from Byzantine precursors of Vauban during the Crusades, of which the famous Krak des Chevaliers built by the Knights of St. John in the Lebanon is the most complete example—structural fortification reached its zenith.



Two of the nine figures specially modelled by Arnold Auerbach for the Avenue Pavilion, Shaftesbury Avenue, W. They are ivory-finished and are placed in amber-lighted niches of fluted aluminium.

Fortified houses with stoutly walled-in courtyards and dependencies continued to be built in turbulent frontier Marches like the Scottish Border. But though "it is probable that the invention of gunpowder and the use of cannon worked no very sudden change," the castle had seen its day and military engineering began once more to have recourse to earthworks. Hurstmonceaux's "mimicry of defence" marks the transition from military stronghold to English manor house. "The Wars of the Roses were fought in open field, not against castle walls." Blois and Amboise, once as redoubtable fortresses as Chinon and Loches, were gradually transformed into ornate palaces.

P. MORTON SHAND

The Cambridge Mediæval History. Volume VI. *Victory of the Papacy.* The Cambridge University Press. £2 10s. net.

THE PROJECTS OF NIKODEMUS TESSIN

THE name of Nikodemus Tessin, Sweden's most illustrious architect of the seventeenth century, has received less recognition than it deserves. This is probably due to the fact that, like Inigo Jones, his most ambitious projects had the misfortune to remain projects and were never built.

Professor Ragnar Josephson, in this volume, deals almost exclusively with Tessin's unrealized designs for the Louvre and Versailles. Political rather than artistic considerations drew the two kingdoms together, but Tessin, long before his appointment as Superintendent of Buildings to Charles XII of Sweden, had visited France and made many personal friends at the Court of Louis XIV, among them Le Nôtre, Girardon, and Mansart. The influence of the first of these is strong in the layout of the gardens at Drottningholm.

Tessin's first design for the Louvre, if executed, would have ruined Perrault's new east front, and the central circular court carried out in Palladian detail, but obviously inspired by Vignola, is an attempt to reintroduce the strict Italian style into France. But the French Academy, which had condemned Bernini's designs, were equally uncompromising when they found these foreign features creeping in again by the back door in the drawings of the Swede. Mansart was immovable, and the design was rejected.

Louis XIV died before Tessin was able to submit fresh plans. Mansart also was dead, but it is unlikely that these new designs would have been more successful than the first. Under Louis XV the Louvre scheme was dropped. As for the Temple of Apollo at Versailles, that scheme was foredoomed from the start. A gayer spirit

was spreading over the Court, and the taste which approved the new Chapel and Watteau's "Embarquement pour Cythère" found Tessin's sober Italianate detail démodé. The book is well indexed, and the illustrations, besides reproducing the finished designs, include many preliminary sketches from Tessin's own hand.

LL. E. WILLIAMS

L'architecte de Charles XII, Nicodème Tessin à la Cour de Louis XIV, par Ragnar Josephson. G. van Oest. Paris et Bruxelles. Price 150 francs.

SOCIETIES AND INSTITUTIONS

ARCHITECTS' BENEVOLENT SOCIETY

THE annual general meeting of the Architects' Benevolent Society was held at the R.I.B.A. on May 14. The President, Sir Banister Fletcher, P.R.I.B.A., occupied the chair.

The President, in moving the adoption of the report, drew attention to the fact that the great event during the year had been the appeal to the allied societies, who had responded very generously both as regards contributions from the societies themselves and contributions from new donors and subscribers. This had been largely due to the efforts of the local honorary secretaries who had brought the Society to the notice of architects in their areas who were not contributors. The scheme had only started and the full effect of the appeal had not yet been felt. They hoped in time to have representatives of all the societies on the Council and had already nominated two members, Mr. Francis Jones, from Manchester, and Mr. C. M. Hadfield, from Sheffield. Canvassing was still going on. By next year, he hoped, they would be able to welcome a very large number of new representatives on the Council.

The annual report was adopted and the election to the Council for the year resulted as follows: President, Sir Banister Fletcher, F.S.A.; vice-presidents, Messrs. Walter Tapper, A.R.A., and H. S. E. Vanderpant; ordinary members, Messrs. C. H. Brodie, Maxwell Ayrton, H. D. Searles-Wood, Sydney D. Kitson, Percy B. Tubbs, H. Austen Hall, L. G. Pearson, W. Curtis Green, E. C. P. Monson, E. P. Warren, F. R. Hiorns, R. Dircks, Francis Jones (representing the Manchester Society), C. M. Hadfield (representing the Sheffield, South Yorkshire and District Society), E. Stanley Hall (representing the Architectural Association), and Arthur Crow (representing the London Society).

The following were re-elected to the same offices: Mr. Maurice E. Webb, honorary treasurer; Sir Charles Nicholson, honorary secretary; Messrs. C. H. Brodie and Osborn C. Hills, honorary auditors.

The annual report states that the total sum given away was £1,947 in grants, and £593 10s. in pensions. With the donations received and the falling-in of stock the Society has been able to invest £1,500.

R.I.B.A. COUNCIL MEETING

Following are notes from a recent meeting of the R.I.B.A. Council:

British Architects' Conference, 1931. It was decided, on the recommendation of the Allied Societies' Conference, to accept the invitation of the Royal Institute of the Architects of Ireland to hold the British Architects' Conference at Dublin in 1931.

The Grissell Gold Medal. It was decided, on the recommendation of the Board of Architectural Education, to abolish the minimum age limit of twenty-one and to make the competition open to those who have not been in practice for a longer period than ten years and who have passed the R.I.B.A. Final or equivalent examination, or have produced certificates from responsible architects to the effect that they have reached the required standard. This revision will not take effect until next year.

The officers of the Board of Architectural Education were appointed as follows for the session 1930–31: Chairman: Mr. L. Sylvester Sullivan. Vice-chairmen: Mr. W. H. Ansell (Chairman of the Examinations Committee); Professor A. E. Richardson (Chairman of the Schools Committee); Professor A. C. Dickie (Chairman of the Prizes and Scholarships Committee). Hon. secretary: Mr. A. H. Moberly.

It was reported that the Institute of Builders had appointed Major F. A. Wallis, M.C., to represent them on the Board of Architectural Education.

The Restoration of St. Paul's Cathedral. It was decided to hold, on a suitable date in June, a special Council dinner at which all the architects who have been concerned with the restoration of St. Paul's Cathedral should be invited as guests of honour, and to have a special general meeting on the same day at which a lecture, illustrated by lantern slides, on the work of restoration should be given.

Higher Buildings in London. The following members were appointed to represent the R.I.B.A. at a conference which is being convened by the London Society to consider the growing tendency to relax the conditions governing the height of buildings in London: Professor S. D. Adshead, and Messrs. Charles Holden, Arthur Keen, and W. Harding Thompson. It was decided to ask the representatives to support the previous policy of the Council in this matter, viz., that the Council are not in favour of any general relaxation of the present conditions as laid down in the London Building Act.

The South Wales Architecture Medal. Mr. G. C. Lawrence was appointed as the R.I.B.A. representative on the jury for the award of the South Wales Architecture Medal.

The Salaried Members Committee—Memorandum on the State of the Profession. A memorandum on the state of the profession, prepared by the Salaried Members Committee, was approved for circulation to members.

R.I.B.A. Grants for Libraries of Schools of Architecture and Allied Societies. It was decided, on the recommendation of the Board of Architectural Education, to make a grant of £100 for the year 1930, viz., £50 to the Board and £50 to the Allied Societies' Conference for the provision of additional textbooks for the use of students of schools and allied societies which have an inadequate supply of such books.

The Fellowship. The council, by a unanimous vote, elected Mr. Allan George, of Toronto, to the Fellowship under the powers defined in the Supplemental Charter of 1925.

Membership. Applications for membership were approved as follows: As Fellows, fifteen applications; as Associates, fourteen applications.

Reinstatement. The following ex-member was reinstated: As Licentiate, Mr. V. V. Vadnerkar.

One application was approved for election as Licentiate under Section III (f) of the Supplemental Charter of 1925.

Resignations. The following resignations were accepted with regret: Messrs. Claude Paterson, A.R.I.B.A., and F. Chapman Clemeshaw, L.R.I.B.A.

Election of Students. The following probationers were elected as students of the R.I.B.A.:

Collie, R. A. (Glasgow School of Architecture).
Cornelius, K. E. (Architectural Association).
Dunn, H. G. (Edinburgh College of Art).
Foley, J. (Northern Polytechnic).
Hall, A. E. (University of London).
Heathcote, E. R. (Cambridge University).
Herbert, P. B. (Birmingham School of Architecture).
Knight, C. A. (University of London).
Miller, A. (Glasgow School of Architecture).
Roberts, R. E. (Liverpool School of Architecture).
Robinson, D. D. (Architectural Association).

FRANCO-BRITISH UNION OF ARCHITECTS

The tenth annual meeting of the Franco-British Union of Architects will be held at Oxford from July 11 to July 14, 1930. The programme for the meeting includes visits to buildings of interest in Oxford, and a whole-day motor excursion to the Cotswold district with visits to Burford, Blenheim,

Bourton - on - the - Hill, Broadway, Stanton, Stanway, Bourton-on-the-Water, Moreton-in-Marsh, etc. The annual dinner, when a number of French architects will be the guests of the British Section of the Union, will take place on Saturday, July 12.

Members of the Union who wish to take part in this meeting are requested to notify the Secretary-General (Lt.-Col. H. P. Cart de Lafontaine, A.R.I.B.A.), 11 Suffolk Street, Pall Mall, London, S.W.1, as soon as possible.

THE SLUM BILL

[BY OUR PARLIAMENTARY REPRESENTATIVE]

STANDING Committee "A" of the House of Commons still continues to make slow progress with the Housing (No. 2) Bill, which contains the Government's slum clearance proposals, and at the end of the fourth sitting clause 1 had not been disposed of.

Clause 1 provides, among other things, that before passing a resolution declaring a clearance area, a local authority shall satisfy itself that alternative accommodation for members of the working classes who will be displaced exists, or can be provided by the authority, and that the resources of the authority are sufficient for the purpose of carrying the resolution into effect.

Lieut.-Col. Fremantle moved an amendment designed to enable the alternative accommodation to be provided by the owner of the property or by a public utility society.

Mr. Greenwood, the Minister of Health, while not able to accept the amendment as it stood, agreed that it contained a point of substance. He promised to consider before the Report stage whether he could bring forward some form of words which would widen the field from which the new houses could be drawn.

The amendment was therefore withdrawn.

Dr. Davies moved an amendment requiring a local authority to transmit to the Minister a description of the accommodation existing or to be provided for re-housing persons displaced.

Miss Lawrence, the Parliamentary Secretary to the Ministry of Health, said the amendment raised the whole question of the policy of housing replacement. As everybody knew, that had led to a disastrous holding up of housing schemes. Clause 7 of the Bill was sufficient to secure replacement. To bring in replacement at this stage might create complications.

The amendment was negatived by 30 votes to 16.

Mr. Chamberlain moved an amendment to ensure the early development by owners on suitable lines of areas which might have been cleared, so as to prevent these areas remaining derelict.

Mr. Greenwood said the amendment would have the effect of giving an advantage in certain circumstances to the owners, and the local authority would be left to "hold the baby." The amendment would make the situation far more difficult for the local authorities.

The amendment was negatived by 23 votes to 13 and the Committee adjourned.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

13135. Blackburn, B. A., and Payne, S., Reinforced-concrete construction. April 29.

13515. Lucas, H. N. Building construction. May 2.

12976. Montalk, R. W. de. Shock-absorbing, etc., means for buildings. April 28.

13107. Small, W. Roofing tiles. April 29.

13552. Strang, D. A. Building construction. May 2.

SPECIFICATION PUBLISHED

328326. Harley, A. Composite plaster boards or slabs intended particularly for building purposes.

ABSTRACT PUBLISHED

326678. Sorensen, H. Fireproof buildings.

THE BUILDINGS ILLUSTRATED

Following are the names of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :

Avenue Pavilion, Shaftesbury Avenue, W. (pages 775–776). General structural alterations, A. G. Goodchild and Son, Ltd. Sub-contractors : Marc-Henri and Laverdet, decoration and fibrous plaster work; Archibald D. Dawnay and Sons, Ltd., steelwork; W. W. Turner & Co., seating; Jeffreys, alterations heating and ventilation; Kinematograph Equipment Co., proscenium curtains; Gaumont British Picture Corporation, Ltd., electrical work.

Stewartby Hall, Stewartby, Bedfordshire (pages 782–785). General contractors, Stanford and Clark, who were also responsible for the reinforced concrete, glass, joinery and plumbing. General foreman, S. Clark. Sub-contractors : Permanite, Ltd., asphalt and waterproofing materials; London Brick Co. and Forders, Ltd., bricks; Bath and Portland Stone Firms, Ltd., stone; Archibald D. Dawnay and Sons, Ltd., structural steel; Frank Burkitt, fireproof construction; Ellis and Everard, Ltd., slates; S. F. Goodwin, central heating and electric wiring; Standard Range and Foundry Co., Ltd., stoves, grates, sanitary fittings and door furniture; National Radiator Co., Ltd., boilers; Baxter and Caunter, Ltd., electric light fixtures; British Electric Transformer Co., Ltd., electric heating; Standard Range and Foundry Co., door furniture; Crittall Manufacturing Co., Ltd., casements and window furniture; David Rowell & Co., iron staircases; Jones Bros., plaster; G. and A. Brown, decorative plaster; F. Gamman and Sons, furniture; Gillett and Johnston, clocks; G. Alexander, lettering of stonework and signs.

The British Red Cross Clinic, Park Square and Peto Place, N.W.1 (pages 788–790). General contractor : E. H. Burgess, who was also responsible for the demolition, excavation, foundations, dampcourses, plaster, joinery, stonework, marble, plumbing and gasfitting. Sub-contractors : Ragusa Asphalte Paving Co., Ltd., asphalt; Redpath, Brown & Co., Ltd., structural steel; Carter & Co., Ltd., tiles and patent flooring; Gardiner, Sons & Co., Ltd., patent glazing, casements, iron staircases, metalwork and window furniture; Thos. Potterton, Ltd., central heating and ventilation; Cochran & Co. (Annan), Ltd., boilers; W. J. Furse & Co., electric wiring, electric light fixtures and bells; Shanks & Co., sanitary fittings; James Gibbons, Ltd., door furniture; Waygood Otis, Ltd., lifts; Becco Engineering and Chemical Co., Ltd., water-softening plant.

House, Holmer Green, Bucks. (pages 794–795). General contractor, Cecil James. Sub-contractors : W. T. Lamb and Sons, fireplace bricks; Langley-London, "Marseilles" tiles; Speirs & Co., stoves and grates, door and window furniture and bells, and sanitary fittings; Rippers, Ltd., casements and joinery.

TRADE NOTES

The directors of Messrs. Saml. Haskins and Bros., Ltd., manufacturers of shopfronts and fittings, rolling shutters and metal and woodworkers, wish to thank the large number of persons who sent expressions of sympathy and valued offers of assistance in connection with the fire that occurred at the firm's head office and works. The directors would also like it to be known that arrangements have been made to complete all contracts and that inquiries will be dealt with as heretofore. A new factory and executive offices will arise as

quickly as modern speed methods of construction permit. It is claimed that the company's products will, in the very near future, be manufactured under conditions that are the last word in highly-specialized efficiency. It should be noted that orders for display fittings, window fittings, etc., are not affected, and will be promptly executed from 4-5 Domingo Street, Old Street, E.C.1, as usual.

*

We have received a booklet concerning Heraklith, a new building slab made of petrified wood-wool and concrete, compressed and impregnated with a chemical compound. The principal use of the slab is for partition walls, but it is claimed that it can be used to great advantage for exterior walls of buildings of any kind, such as outbuildings, sheds, factories and workshops, cold stores, cinema studios, hangars, dance halls, garages and bungalows. It is also said to be suitable for ceilings, roofs, floors and wall panelling. Eighteen advantages are claimed for the slab. It is claimed to have special heat-insulating properties, and to be fireproof, soundproof, and one of the lightest building materials. It is said that the slab can be sawn, cut, chiselled, bevelled, morticed, screwed, nailed and drilled with the greatest ease and without the risk of splitting. The sole distributors and licensees are Messrs. Newman and Holt, Ltd., 24 Holborn, London, E.C.1.

*

Messrs. Treloar and Sons have for some time been conducting investigations with a view to eliminating the liability of linoleum to buckle and rot, when laid on newly screeded cement floors. Until recently the trouble was deemed insurmountable, and the firm made it a rule never to cover cement floors with linoleum unless the screeding had been completed at least three months. They tried many devices in order to overcome the difficulty in dealing with "rush" jobs, and the most successful was three-ply bitumen sheeting, laid direct on the cement, and then fitting the linoleum on top of it; but even so, the linoleum often buckled badly and became foul. As an experiment, a plain brown linoleum, one-eighth inch thick, was made in the usual way, complete with painted canvas backing, but to this canvas backing was fixed mechanically a backing of bitumen. This experimental roll was laid in a room having a newly screeded floor, and although eight months passed, the bituminous backed linoleum did not shrink or buckle, and there was no foulness. The firm have now sent us a sample of this linoleum. It had been scored through, and then deliberately broken, in order to show how firmly the backing was fixed. Plain and inlaid linoleum, and cork carpet, it is said, can be made in the same way. The new linoleum is primarily intended for large contracts, where delay would be a serious matter, but the firm will be very glad to undertake small trial jobs for demonstration purposes.

THE ARCHITECTS' DIARY

WEDNESDAY, MAY 21

R.I.B.A., 9 Conduit Street, W.1. Exhibition of Architects' Drawings of 1800–1850. 10 a.m. till 8 p.m. Saturdays 10 a.m. till 5 p.m. Exhibition closes on May 24. **10 a.m.**

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Exhibition of work of Eric Mendelsohn. Until June 14. 10 a.m. till 6 p.m. (Saturdays 5 p.m.) **10 a.m.**

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition open to the public. **10 a.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

PARSONS' GALLERIES, 315-317 Oxford Street, W.1. Exhibition of Scottish Art. 10 a.m. to 6 p.m. Until May 31. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art, held in the North Court. 10 a.m. to 6 p.m. (Thursdays, 10 a.m. to 10 p.m.) **10 a.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

THURSDAY, MAY 22

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Literature Standing Committee. **4.30 p.m.**

ARCHITECTURE CLUB. Dinner to Eric Mendelsohn, to be held at the Savoy Hotel, W.C. **7.30 p.m.**

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. Visit to the First Clubland Church, 54 Camberwell Road, S.E.5. **3 p.m.**

FRIDAY, MAY 23

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Finance and House Committee. **4.30 p.m.**

SATURDAY, MAY 24

Sunrise, 4.57 a.m. Sunset, 8.57 p.m.

MONDAY, MAY 26

R.I.B.A., 9 Conduit Street, W.1. Meeting of the Executive Committee. 4 p.m. General Meeting. "Recent Excavations at Ur." By C. Leonard Woolley, M.A., HON.A.R.I.B.A. 8 p.m. **4 p.m.**

TUESDAY, MAY 27

ST. BARTHOLEMEW'S HOSPITAL. A ball, in aid of the Reconstruction Fund, is to be held at the Locarno Dance Hall, 158 Streatham Hill, S.W.2. Tickets:—Gentlemen 10s. Ladies 7s. 6d.

WEDNESDAY, MAY 28

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Father of English Pottery—Josiah Wedgwood, F.R.S., Potter, Inventor and Man of Science." By Harry Barnard. Frank H. Wedgwood will preside. **8 p.m.**

FRIDAY, MAY 30

R.I.B.A., 9 Conduit Street, W.1. Intermediate Examination. Until June 5.

TOWN PLANNING INSTITUTE. At Caxton Hall, Caxton Street, S.W.1. "Town Planning Economics." By J. Macaulay. **6 p.m.**

SOCIETY FOR THE PROTECTION OF ANCIENT BUILDINGS. At the Institution of Civil Engineers, Great George Street, Westminster, S.W.1. Annual General Meeting. An address will be given by Professor W. R. Lethaby. The Most Rev. Lord Davidson of Lambeth, D.D., D.C.L., LL.D., G.C.V.O., will preside. Tea 4 p.m. **4.30 p.m.**

SATURDAY, MAY 31

Sunrise, 4.50 a.m. Sunset, 9.5 p.m.

SOUTH EASTERN SOCIETY OF ARCHITECTS. Visits to Hampton Court and Richmond, organized by the Croydon and Guildford Chapters. It is proposed to visit Hampton Court at 10 a.m., and proceed to Richmond for lunch (5s.) at 1.30 p.m., followed by a tour of the Richmond district. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. In connection with the Bicentenary of Josiah Wedgwood, a special exhibition of Wedgwood ware will be opened in Room 136. **10 a.m.**

MONDAY, JUNE 2

INSTITUTION OF ELECTRICAL ENGINEERS. Summer Meeting at the Irish Centre. June 2–6, inclusive. Assemble in the evening at the Gresham Hotel, Dublin.

TUESDAY, JUNE 3

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. Annual Meeting. **7 p.m.**

GARDEN CITIES AND TOWN PLANNING ASSOCIATION, 3 Gray's Inn Place, W.C.1. Whitsun Housing and Town Planning Tour. June 3–14 inclusive. Visit to Northern Capitals of Europe. Full particulars on application to the Secretary of the Association.

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Motor trip in Co. Wicklow, including inspection of overhead transmission lines. Lunch and tea at Glendalough.

WEDNESDAY, JUNE 4

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Proceed by special train to Limerick for visit to the Shannon Scheme.

THURSDAY, JUNE 5

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Visit to the brewery of Messrs. A. Guinness, Sons & Co. Lunch by invitation of the Company. Afternoon: Leave Dublin by special train for Belfast. Evening: Reception by the Lord Mayor of Belfast, Rt. Hon. Sir William Coates, at the City Hall.

SATURDAY, JUNE 7

Sunrise, 4.45 a.m. Sunset, 9.12 p.m.

WHIT MONDAY, JUNE 9

THURSDAY, JUNE 12

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual Conversazione, to be held at the Natural History Museum, South Kensington, S.W.7.

SATURDAY, JUNE 14

Sunrise, 4.43 a.m. Sunset, 9.18 p.m.

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND. Gloucestershire Branch. At the Town Hall, Cheltenham. Conference under the chairmanship of Major-General Sir Fabian Ware, K.C.V.O., K.B.E. 11 a.m. Opening address by the Mayor of Cheltenham, followed by "Regional and Town Planning," by Captain J. H. Trye, C.B.E., R.N. Discussion on the subject to be opened by G. L. Pepler. 12.45 p.m.: Lunch. Afternoon Session, 2 p.m.–4 p.m.: "The Traditional Building of the Cotswold and surrounding Stone Districts." By H. Stratton Davis, F.R.I.B.A.; and "Modern Building and the Use of New Materials," by Thomas Falconer, F.R.I.B.A., followed by discussions to be opened by Sir Philip Stott, Bart., and J. W. Robertson Scott, respectively. **11 a.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Annual General Meeting and Annual Dinner. Particulars will be announced later.

CHELMSFORD PUBLIC LIBRARY COMPETITION. Latest date for submission of designs.

KINGSTON-UPON-THAMES PUBLIC BATHS COMPETITION. Latest date for submission of designs.

MONDAY, JUNE 16

R.I.B.A., 9 Conduit Street, W.1. Election of Council and Standing Committees: Election of Members. **8 p.m.**

WEDNESDAY, JUNE 18

R.I.B.A., 9 Conduit Street, W.1. British Architects' Conference, to be held at Norwich. Until June 21 inclusive.

FRIDAY, JUNE 20

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. At the Royal Society of Arts, John Street, Adelphi, W.C.2. Provisional date for a lecture on "Beautification of our Arterial Roads." By Thomas C. Adams.

SATURDAY, JUNE 21

Sunrise, 4.42 a.m. Sunset, 9.21 p.m.

ROYAL SANITARY INSTITUTE. Annual Congress to be held at Margate until June 28 inclusive. Various lectures, discussions and visits will be held throughout the week. **12 noon.**

WEDNESDAY, JUNE 25

ROYAL SANITARY INSTITUTE. At Margate. Meetings of the Architectural and Engineering Sections. **10 a.m.**

FRIDAY, JUNE 27

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL SOCIETY, The Castle, Winchester. Excursion to the Joinery Works of Messrs. W. E. Chivers and Sons, Ltd., Devizes, and buildings of architectural interest in the neighbourhood. A General Meeting will be held after lunch.

SATURDAY, JUNE 28

Sunrise, 4.45 a.m. Sunset, 9.21 p.m.

WEDNESDAY, JULY 2

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION. Annual Exhibition to be held at Portsmouth until July 8.

FRIDAY, JULY 4

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Joint Meeting with the Hampshire and Isle of Wight Architectural Association. Visits to the new Town Hall (description by E. Berry Webber), the Old Bargate (description by H. P. Cart de Lafontaine), Guildhall, Empire Theatre, and Ocean Liners. Particulars are obtainable from the Hon. Secretary.

SATURDAY, JULY 5

Sunrise, 4.49 a.m. Sunset, 9.19 p.m.

WORTHING MUNICIPAL BATHS COMPETITION. Latest date for submission of designs.

SUNDAY, JULY 6

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Excursion to Romsey and the New Forest.

SATURDAY, JULY 12

Sunrise, 4.56 a.m. Sunset, 9.14 p.m.

WEDNESDAY, JULY 16

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Annual Excursion to Denmark and Sweden, returning to London on July 29. Particulars of the tour, etc., are obtainable from F. R. Yerbury, the Secretary, Architectural Association.

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Liège. July 16–17.

FRIDAY, JULY 18

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Anvers. July 18–19.

SATURDAY, JULY 19

Sunrise, 5.48 a.m. Sunset, 9.8 p.m.

SATURDAY, JULY 26

Sunrise, 5.13 a.m. Sunset, 8.59 p.m.

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Visits to Leeds Castle, Chilham or Bodiam, etc., organized by the Canterbury and Tunbridge Wells Chapters. Particulars of the visits are obtainable from the Hon. Secretaries of the Chapters.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BARKING Education Committee is to erect an elementary school for 200 children in Hurstbourne Road.

The L.C.C. is to complete the development of the BECONTREE estate by the erection of a further 4,500 houses at a cost of £2,115,000. Messrs. C. J. Wills and Sons, Ltd., are to carry out the work.

The BERMONDSEY B.C. is to borrow £75,650 for the erection of tenements on the Rotherhithe Street area.

Messrs. J. W. Heath and Sons are to erect twenty houses in Amruth Road, BROCKLEY.

Mr. William Alexander is to erect a Memorial Hall on the Churchdown estate, BROMLEY.

Plans passed by CITY OF LONDON Corporation: Buildings on site of 107, 8, 9, Leadenhall Street, and 2, 4, 6, St. Mary Axe, for Bankside Investment Trust; buildings on site of 15 Arthur Street, for Northern and London Investment Trust, Ltd.

The Improvements Committee of the CITY OF LONDON Corporation has prepared a plan for widening Queen Victoria Street to a minimum width of seventy feet between Great Trinity Lane and Garlick Hill, at an estimated cost of £250,928.

The CITY OF LONDON Corporation is to erect a new dormitory block at the Freeman's School, at an estimated cost of £10,000.

The City Lands Committee of the CITY OF LONDON Corporation has approved arrangements in connection with the rebuilding of Corporation property on the Conduit Mead Estate, 107 New Bond Street, 28 Brook Street, and 2 Haunch of Venison Yard.

The EAST HAM Corporation is considering a site in Manor Road, for the erection of a maternity and child welfare centre.

The EAST HAM Corporation has decided to erect the extensions at the isolation hospital by direct labour, at a cost of £38,500.

Plans passed by the EAST HAM Corporation: Alterations, 415-417 Barking Road, for Messrs. J. Stokes and Sons, Ltd.; distributing depot, United Dairies, High Street, Old Cooperage, for Mr. F. Dear (architect); alterations, 27 High Street, for Messrs. J. Stokes and Sons; four houses, Vicarage Lane, for Mr. F. Hamlett; alterations, 3, 4 and 5 Station Parade, Upton Park, for Messrs. Lee Dickens & Co.; three houses, Sussex Road, for Mr. C. Griffiths; two houses and workshop, Melbourne Road, for Mr. A. Quilty; sixty-two houses and two shops, Roman Street, for Messrs. J. Stokes and Sons, Ltd.

Plans passed at ELTHAM: Two houses, Southend Lane, for Mr. A. W. Childs; fifteen houses, Cambridge Green, for Mr. G. T. Scudamore; fifteen bungalows, Blanmerle Road, for Mr. Robert Kevan; four houses, Gerda Road, for Messrs. Eaglen Bros.; shops, garages and additions to drill hall, High Street, for Mr. J. B. Fyson; eight houses, Larchwood Road, for Mr. B. Pudney.

Messrs. William Wilmot, Ltd., are to erect twenty-four houses in Homestall Avenue and Mundania Road, FOREST HILL.

Plans passed at GREENWICH: Offices and stairs, Horn Road, for Messrs. Shell-Mex, Ltd.; six houses, Shrewsbury Road, Shooters Hill, for Messrs. Flood and Wright.

The HACKNEY B.C. is obtaining a site in Elgleford Street, for the erection of branch baths.

The HACKNEY B.C. is acquiring a site in Clapton Road, for a housing scheme.

Plans passed by the HACKNEY B.C.: Building, Well Street, for Mr. S. A. Heaps; additions, Empress Electric Theatre, Mare Street, for Mr. C. A. Aish; addition to factory, rear of 25 and 27 Wellington Road, for Mr. F. E. Mason; extensions, Messrs. Hunt Partners' factory, Theydon Road, or Mr. L. A. Bowden.

The L.C.C. is to extend the North Western Fever Hospital, Lawn Road, HAMPSTEAD, at a cost of £119,000.

Plans passed at LEE: Four houses, Baring Road, for Mr. G. W. Crosby; shop premises, 144 High Road, for Mr. H. Smith; eight houses, Upwood Road, for Mr. W. T. A. Froude; eighteen houses, Canberra Road, for Messrs. Fretho, Ltd.

The L.C.C. is to vote £3,353,000 for capital expenditure on housing for the next twelve months.

The L.C.C. reports that the number of unhealthy areas for which the Council has schemes in hand is twenty-three. The Council has condemned three other areas, but the schemes have not yet been submitted to the Minister of Health for confirmation. These twenty-six areas comprise 111½ acres of land.

The Surrey Education Committee is to erect an elementary school in Bordergate Lane, MITCHAM.

The governors of the London United Charities are to develop the Bordergate estate at MITCHAM.

Plans passed at PLUMSTEAD: Eight bungalows, Kingsdale Street, for Mr. Robert Kevan; twenty garages, Wickham Lane, for Mr. W. F. Cave.

The ST. PANCRAS B.C. is seeking sanction to borrow £11,000 for the acquisition of premises and land in Arlington Street, for the provision of a highways depot.

Plans passed by the SOUTHWARK B.C.: Additions 72 South Street for Mr. T. Wilmot; building, 14-16 Penrose Street, for the borough engineer and surveyor.

The L.C.C. and the Ministry of Transport have agreed upon a revised widening scheme at the Elephant and Castle, SOUTHWARK, the cost being estimated at £1,950,000. Provision is made for a semi-circular loop.

The TOTTENHAM Education Committee is to erect a new school for about 960 children, and a new school for about 120 children, near Lordship Lane.

The WESTMINSTER City Council has approved amended plans of the proposed hotel building to be erected on the site of Dorchester House, with frontages to Park Lane and Deanery Street, submitted by Messrs. Curtis Green and Partners.

Plans passed by the WESTMINSTER City Council: Shop, Grosvenor Street, for Mr. M. Ayrton; new street, from Petty France to Vandon Street, for Messrs. Sole, Sawbridge & Co.; balconies and oriel windows, Brook Street and Brook's Mews (Claridge's Hotel extension), for Mr. O. P. Milne.

The L.C.C. has passed plans submitted by Messrs. Hoare & Co., Ltd., for alterations at the Red Lion Brewery, St. Katherine Street, WHITECHAPEL.

Plans passed at WOOLWICH: Factory, 725 Woolwich Road, for Messrs. Thomas and Edge; factory, rear 403, 135 Woolwich Road, for Messrs. George Pearson and Son.

SOUTHERN COUNTIES

Mr. J. M. Sheppard, architect, is to prepare a layout plan for the establishment of a colony for 1,500 mental patients at BOTLEY, near Chertsey.

The DARTFORD U.D.C. Health Committee has approved the plan, submitted by the surveyor, for the erection of public conveniences and slipper baths on a site in Spital Street. Tenders are to be invited for the erection of the building.

Plans passed by the DARTFORD U.D.C.: Alterations to premises, Orchard Street, for the Dartford Industrial Co-operative Society, Ltd.; new road and six bungalows, Heathlands Rise, for Mr. G. H. Giles; extensions, 115 and 116 Priory Road, for Mr. J. W. Knapp; two houses, Heath Lane, for Mr. C. W. Harris; twenty-five houses, Heathlands Estate, for the New Ideal Homesteads, Ltd.

The EASTBOURNE Corporation has decided to erect sixteen houses on land adjoining the bus depot.

Plans passed by the OXFORD Corporation: Extension, cabinet-making works, Cowley Road for Messrs. Greenings; two houses, Binswood Avenue, Headington, for Messrs. F. and E. J. Watson; butcher's shop and house, Cinnaminta Road, for Mr. F. W. Haines; four houses, Iffley Road, for Mr. George Simmons; buildings, Iffley Road, for Messrs. Hinkins and Frewin, Ltd.

Mr. G. Mitchell is to develop the Highbury estate at Cosham, PORTSMOUTH.

Messrs. Vosper & Co., Ltd., are to extend their premises at the Camber Dock, PORTSMOUTH.

Plans passed by the PORTSMOUTH Corporation: Forty-five houses, Green Lane, Hilsea, for Mr. S. Brittan; twenty-five garages, Langstone Road, for Messrs. McCarthy Bros.; alterations, "Baker's Arms" public-house, Wiltshire Street, for Messrs. H. G. Hellyer and Son; seven houses, Torrington Road, for Mr. J. J. Canterbury; twenty garages, Torrington Road, for Messrs. Dye Bros.; drapery premises, Fratton Road, for Portsea Island Mutual Co-operative Society, Ltd.; business premises, 206–211 Commercial Road, for British Home Stores, Ltd.; extensions, Royal Portsmouth Hospital, for the governors of the hospital; grand stand, Park Road, for Messrs. Humphries, Ltd.; two houses, Clarence Road, for Mr. W. Ward; alterations, "Clarendon House," London Road, for Mr. T. Humphries; five houses, Stride Avenue, for Messrs. McCarthy Bros.; three houses, Merrivale Road, for Mr. J. J. Rogers; alterat ons, "Blue Anchor" public-house, Kingston Cross, for Messrs. Geo. Peters, Ltd.; house, Amberley Road, for Messrs. Gates and Morgan.

The Board of Education has approved the plans of the Surrey Education Committee, for the erection of an elementary school at SELSDON.

The SURREY C.C. has approved an amended design, prepared by Sir Edwin Lutyens and sanctioned by the Ministry of Transport, for the new bridge over the River Ember. The estimated cost of the amended design will be no greater than that of the original design.

SOUTH-WESTERN COUNTIES

The Hampshire Education Committee is to enlarge the council school at BADDESLEY, to accommodate an additional 130 scholars.

The Hampshire Education Committee is to erect a new elementary school at BASINGSTOKE, for 490 girls, and a school for 320 juniors.

The BRISTOL Corporation has purchased twelve acres of land at Cooke Lane, for a housing scheme.

The BRISTOL Corporation has decided upon the erection of a further 220 houses on the Bedminster and Speedwell housing estates, at an estimated cost of £87,000.

The Board of Education has approved the plans of the Hampshire Education Committee, for the erection of a senior mixed school at CHRISTCHURCH, at a cost of £20,000.

Plans passed by the DORCHESTER Corporation: Flat, Old Grammar School, South Street, for Messrs. Henry Duke and Son; alterations Ideal Home Dairies, for the Bladen Estate; two bungalows, Edward Road, for Mr. Harding; enlargement of stores, 9 South Street, for Messrs. Sercombe and Hayes; extension, printing works, for *Dorset County Chronicle*.

The Hampshire Education Committee has obtained the approval of the Board of Education for the erection at Shakespeare Street, EASTLEIGH, of a junior mixed school for 300 pupils, at a cost of £12,000.

The HAMPSHIRE C.C. is to make provision for small-pox hospital accommodation.

The Hampshire Education Committee is to erect an elementary school in the NURSLING district for 200 senior pupils, and capable of extension for another 200.

The Hampshire Education Committee is now to proceed with the erection of a senior mixed school for 500 pupils at TOTTON, at a cost of £25,500.

The TRURO Corporation is to acquire four acres of land at Hendra for a housing site.

The Hampshire Education Committee has decided to erect a standard type elementary school for 400 pupils, at WESTEND.

Plans passed by the WEYMOUTH Corporation: Alterations, 81–82 St. Mary Street, for Messrs. Timothy White, Ltd.; two houses, Southlands Road, for Messrs. S. Jackson and Sons; house, Buxton Road, for Messrs. Andrews and Andrews; alterations and additions, 12 Frederick Place, for Messrs. S. Jackson and Sons; two houses, Spa Road, for Mr. A. J. Samways; two houses, Dorchester Road, and twelve garages, Dorchester Road, for Messrs. Andrews and Andrews; alterations to shop, St. Edmund Street, for Messrs. Crickmay and Sons.

The Hampshire Standing Joint Committee has voted £7,700 for the erection of a sessional court and police station at WHITE HILL.

MIDLAND COUNTIES

Bishop Herford is to erect a temporary church at Rosliston Street, BURTON-ON-TRENT.

The BURTON-ON-TRENT Corporation has purchased further land on the Horninglow estate for housing purposes.

The Worcestershire Education Committee is negotiating for a site at CATSHILL, for the erection of a senior school.

The Worcestershire Education Committee is preparing plans for the erection of a senior school at EVESHAM.

The Worcestershire Education Committee is obtaining a site at HALESOWEN, for the erection of a senior school.

The Northants C.C. is to erect four police houses in KETTERING and four in WELLINGBOROUGH, at a cost of £4,250.

The Worcestershire Education Committee has prepared plans for the enlargement of the Valley Road school, LYE.

The Northants Education Committee has obtained a site at RUSHDEN for the erection of a junior school.

The SOUTHWELL R.D.C. has prepared a scheme for the erection of a refuse destructor and disinfecting station at Edwinstowe, at a cost of £10,000.

The Board of Education has approved plans for the enlargement of the Brook Road school, STOURBRIDGE.

The governors of the King Edward VI. Grammar School, STOURBRIDGE, have obtained the approval of the Board of Education to plans for the new assembly hall and gymnasium, at a cost of £12,000.

The Northants Education Committee has obtained a site at WESTON FAVEL for the erection of a senior school.

The WORCESTERSHIRE Standing Joint Committee has purchased sites at Shatterford, Berrow, Inkberrow, Tenbury, Upton and Redditch, for the erection of police cottages.

The WORCESTERSHIRE C.C. has asked the county surveyor to prepare a scheme for the reconstruction of thirteen canal and railway bridges, estimated to involve an expenditure of £46,000.

The Worcestershire Education Committee has approved plans for the extension of the Silver Road school, WYTHALL.

NORTHERN COUNTIES

The Brighouse Industrial Society, Ltd., is to erect shops at Griffe Street, Wyke, BRADFORD.

The BRADFORD Corporation has approved sketch plans prepared by the city architect for the erection of a new operating theatre block and covered way at St. Luke's hospital, at an approximate cost of £10,000.

Mr. A. H. Hutton is to erect houses and shops at Fenby Avenue and Sticker Street, BRADFORD.

Messrs. Sidney Bacon's Pictures, Ltd., are to erect a cinema in Warwick Road, CARLISLE.

The Ministry of Health has held an inquiry into the application of the CARLISLE Corporation for sanction to borrow £62,000, for purposes of the water undertaking.

The CARLISLE Corporation Housing Committee is purchasing thirteen acres of land adjoining the Raffles housing estate, for housing and road widening purposes.

The CHESTERFIELD borough engineer has prepared plans for the reconstruction of Lockford bridge, at a cost of £3,725.

The CHESTERFIELD Corporation Joint Improvement and Baths Sub-Committee has met to consider a site for the proposed central baths.

The CHESTERFIELD Corporation has purchased land at Old Whittington, for a housing scheme.

The CHESTERFIELD Corporation has appointed Messrs. Clayton and Rignall and Messrs. Rollinson and Sons as architects for the design of further houses on the Highfield estate.

At a meeting of the CHESTERFIELD Corporation Markets Committee the borough surveyor submitted plans with respect to the proposed erection of slaughter-houses, and the town clerk was directed to make application to the Ministry of Health for sanction for a loan of £8,000.

The Durham County Education Committee has decided to erect the new school for 450 scholars at Bullion Road, CHESTER-LE-STREET, by direct labour, at an estimated cost of £12,500.

The CHESTER-LE-STREET U.D.C. is to undertake a scheme of sewage disposal, at a cost of £45,000.

The DURHAM County Council has submitted to the Ministry of Health plans for the erection of an admission block at the county mental hospital.

The EASINGTON Rural District Council is seeking sanction to borrow £60,300 for conveying the sewage of Haswell, Hetton, Murton Colliery, etc., to the sea, also £143,160 for the conversion of privies into water-closets.

The MANCHESTER Corporation is to erect public baths at New Moston, at a cost of £30,000.

The MANCHESTER Corporation has prepared a scheme for the erection of public washhouses as follows: Longsight, £8,500; Newton Heath, £11,000; Moss Side, £8,750; Collygurst, £15,000; Clayton, £17,000; Openshaw, £6,000; Hulme, £21,000; and Gorton, £17,500.

In connection with the proposal for the erection of a high level bridge across the MANCHESTER Ship Canal at Trafford Park, representations are being made to the Manchester Regional Town Planning Committee for the consideration of a scheme for a tunnel instead.

Plans passed by the OTLEY U.D.C.: Sub-station, Wharfedale Ironworks, for Bremner Machine Co.; house, Eshams estate, for Mr. Longstaff; house, Harecroft Road, for Mr. C. Newstead.

The ROTHERHAM Education Committee has instructed the borough engineer to prepare revised plans for the enlargement of the Kimberworth and South Grove central schools.

The ROTHERHAM Education Committee has approved revised plans for the proposed new central school at Park Street, incorporating the provision of a swimming bath, at an additional estimated cost of £14,500.

The ROTHERHAM Corporation has approved plans submitted by the borough engineer for the erection of conveniences and waiting-rooms in connection with the College Street improvement scheme, and authorized the plans to be forwarded to the Parish Church and Ecclesiastical authorities for their approval.

At a meeting of the SHEFFIELD Corporation the city architect reported that large-scale drawings had now been prepared for the new central reference library and art gallery, and he submitted details as to the general construction. The Committee authorized him to invite tenders for the erection of the new buildings.

The STALYBRIDGE Corporation has asked the Housing Committee to consider the question of providing further housing accommodation.

The WARRINGTON Corporation is negotiating for land at Winwick, for housing purposes.

The WARRINGTON Corporation has asked the Housing Committee to expedite its proposals for the clearance of slum areas.

Plans passed by the WARRINGTON Corporation: Extension of electrical compound building in works area, Loushers Road, for the Dussek Bitumen Co., Ltd.; alterations and additions to shop premises, 10 Bridge Street, for Mr. Frank Hallett; two houses, St. Mary Street, for Mr. Albert Wright; store, Stafford Road, for the Ferrous Lighting Casting Co.

The WARRINGTON Corporation Special Committee has considered the report of Messrs. Abercrombie and Kelly with regard to the creation of a civic centre adjoining the town hall, and examined the plan prepared by the firm. After consideration, it was decided that the scheme for the erection of municipal offices on the East Drive leading to the town hall be approved and recommended for adoption; that the scheme for the erection of an art gallery, library and museum on the West Drive to the town hall be approved; and that an assessor be appointed to draft conditions of competition for designs for municipal offices, art gallery, library and museum.

Messrs. R. J. Patchett, Ltd., are to erect 100 houses at WIBSEY, near Bradford.

SCOTLAND

Messrs. Kyle and Frew are to develop the Scotstown estate, GLASGOW.

The GLASGOW Corporation is considering the erection of a public wash-house in Summertown Road.

Messrs. Wilson Bros. are to erect shops in Kilvindale Road, GLASGOW.

The GLASGOW Corporation has approved the line of the proposed new bridge over the River Cart at Pollusshaws, plans for which are now being prepared by the city engineer.

MISCELLANEOUS

The DOUGLAS (I.O.M.) Corporation Housing Committee has deferred consideration of the layout plan of additional houses at Pulrose.

Plans passed by the DOUGLAS (I.O.M.) Corporation: Alterations to premises, Castle Mona Avenue, for Mr. Kelly; secretary's office, Noble's Hospital, for the hospital trustees; alterations to premises, Well Road Hill, for Mr. H. Fayle; shop, Queen's Promenade, for Mr. G. J. Maley.

The DOUGLAS (I.O.M.) Corporation Housing Committee has instructed the architect to proceed with the preparation of plans for the erection of houses at Thornhill.

The Associated Portland Cement Manufacturers, Ltd., are to improve their wharf at the cement works, River Medina, NEWPORT (I.O.W.).

Plans passed by the NEWPORT (I.O.W.) Corporation: Alterations, 37 High Street, for Messrs. J. H. Dewhurst, Ltd., on behalf of Messrs. Eastmans, Ltd.; alterations, 49 Pyle Street, for Messrs. Pascall Atkey and Son, Ltd.; house, Whitepit Lane and house, College Road, for Mr. F. Chiverton, architect; house, Medina Avenue, for Mr. F. Lock; house, College Road, for Mr. J. E. Lockhart.

COMPETITION CALENDAR

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs: June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor: J. Ernest Franck, F.R.I.B.A. Premiums: £300, £200, £100 and £50. Particulars, etc., obtainable from A. W. Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor: H. V. Ashley, F.R.I.B.A. Premiums: £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs: July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall, which is to be built on the site of the old town hall at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

July 31.—The Dudley Education Authority invites architects having an office within a radius of fifteen miles of Dudley to submit competitive designs for a Council school to accommodate 320 children, to be erected on the Brewery Fields estate; also a school for 400 children on the Priory estate. Assessor: Herbert T. Buckland, F.R.I.B.A. Premiums: £150, £100, and £50. Applications for conditions of the competition, etc., should be made to J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley, by April 30. Deposit £1 1s. Latest date for submission of designs: July 31.

September 1.—The Bangor (Co. Down) Borough Council invites architects or town planners to submit designs in competition for laying out the sea front within the Borough. Assessor: Professor Patrick Abercrombie, F.R.I.B.A. Premiums: £150 and £50 for first and second places, respectively. Copies of the conditions and plans will be forwarded on application to J. Milliken, Town Clerk, Borough Council Offices, Bangor, Co. Down. Deposit £1 1s. Latest date for submission of designs: September 1.

No date.—The Carlisle Corporation invites British architects to submit designs for the façade to English Street and the Victoria Viaduct, suitable for shops and business premises. The site was previously occupied by the Prison. The total length of the frontage is approximately 358 ft. Assessor: Francis Jones, F.R.I.B.A. Premiums: £300, £200, and £100. Particulars of the competition, etc., may be obtained from Percy Dalton, A.M.INST.C.E., A.R.I.B.A., City Engineer, 18 Fisher Street, Carlisle. Deposit, £1 1s.

No date.—The General Syndicate, Ltd., invites architects to submit competitive schemes for the development of a site at Liverpool, fronting St. John's Lane, Queen Square and Rose Street. Premiums: £250, £100 and £50, for first, second and third prizes, respectively. Particulars, etc., are obtainable on application to the Secretary, the General Building Syndicate, Ltd., 36 St. Martin's Lane, W.C.2.

THE PUBLISHER'S PAGE

"MESSRS. Tunstall Small and Christopher Woodbridge are like recording angels whose industrious pencils snatch from oblivion the deeds of obscure but worthy witnesses to the genius of the Georgian tradition." So wrote a reviewer of Messrs. Small and Woodbridge's books, *Houses of the Wren and Early Georgian Periods*, and *Mouldings of the Wren and Georgian Periods*. These brilliant young authors have now turned their recording pencils towards the activities of an earlier period, and their new book, *Mouldings of the Tudor Period*, published today by the Architectural Press, will enhance the high reputation which they have already won for themselves by their previous books. Their latest production is a portfolio of full-size sections of mouldings selected from the best small domestic work of the Tudor Period, which has been taken broadly as including Elizabethan and Jacobean work, and as they have borne well in mind the fact that the book's usefulness will lie mainly in the sphere of domestic design, they have excluded from the book all mouldings taken from the larger examples of Tudor work.

The portfolio is in every respect a companion volume to *Mouldings of the Wren and Georgian Periods*, except that in the case of the Tudor volume a small measured drawing to a scale of three-eighths of an inch to one foot has been included with every set of mouldings, in order to show their position and relationship. This arrangement will add greatly to the value of the book, particularly as it will thus contain a great deal of useful information about the details of Tudor domestic work in addition to its comprehensive survey of the mouldings of the period. The portfolio is published at the modest price of 8s. 6d., and so comes under the same category as their previous books, of which another reviewer wrote: "We must be thankful that there are those who will undertake the labour of measuring, recording, and photographing what examples remain with us from an age of fine house-building, and doubly thankful that the volume that contains them is not one of those ponderous tomes for which guineas are paid, but something slimmer and more companionable, a book to keep in the office rather than in the library."



Mr. Tunstall Small.

ON the 28th of this month there will be published in this JOURNAL the first number of a new serial, entitled *Settling-up Honeywood*, by the author of *The Honeywood File*.

In the last page of that book it was hinted that a second Honeywood file probably existed. It now appears that the supposition was perfectly correct, and, after being subjected to that clarifying process which is the special secret of Karshish, that file is being presented to our readers.

The form of *Settling-up Honeywood* is identical with that of its predecessor; the manner is the author's, and the matter comprises the vexed questions of accounts, charges, extras, defects, renewals and replacements, and of liabilities of architect and builder; together with the unexpected and perplexing problems which may arise after a house is occupied and before all is finished and paid for.

That unexpected and puzzling problems will come into evidence at Honeywood there is good reason to suppose; for James Spinlove, the architect, has shown that he lacks technical experience and ordinary gumption; Grigblay, the builder, is a just but masterful man who will not brook being put upon; and the good-heartedness of Sir Leslie Brash, the owner, is not likely to obscure his self-importance so far as to reconcile him to paying more than the minimum or being satisfied with less than the best; but besides this, *The Honeywood File* told of various matters which, though they passed into oblivion for the time being, are certain to claim attention before the whole story of Honeywood is told. The failure of the paint, which began to show defects even before the house was occupied, is particularly to the fore. Many old friends, it appears, will come on to this new stage, as well as characters we have not before met. Spinlove, Grigblay, Sir Leslie and Lady Brash, their inscrutable daughter who calls herself "Pud," and Tinge, the quantity surveyor, we may certainly expect to meet again and, among others, we devoutly hope, Ned Bloggs, the foreman, one of the most lightly touched but most vivid characters of the earlier book.

MOST publishers are semi-mythical personages (how often do we meet a self-confessed publisher face to face?), and the publisher of THE ARCHITECTS' JOURNAL is no exception to this rule. Hence, although he is "by no means a negligible person" (*vide* THE ARCHITECTS' JOURNAL for May 7), he is unblushing enough to confess that he is but human and can err, as is attested by the following letter which he recently received from an architect-subscriber:

The Publisher,
The Architectural Press, Ltd.

DEAR SIR,

THE ARCHITECTS' JOURNAL

I am in receipt of your letter of the 17th instant, and at first sight thought I needed new lenses. On cleaning my glasses, however, I find that I read your letter correctly and that you have arrived at the astonishing conclusion that I no longer take THE ARCHITECTS' JOURNAL. Who in the profession could possibly live without it, and who has started this terrible tale?

To show how utterly untrue this malicious slander is, I may add that the JOURNAL has arrived as usual this morning.

I can only conclude that a public apology will now appear in your columns.

Yours faithfully,

G. H. W.

This letter seems to indicate that all architects are not afflicted with Mr. Spinlove's ungracious method of correcting errors.



Mr. Christopher Woodbridge.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2½

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour ;* NAVVY, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day :

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
If left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 1 17 6
DO. 6-2-1, per yd. cube 1 12 6
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 14 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* BRICKLAYER, 1s. 8½d. *per hour ;* PLUMBER, 1s. 8½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0

Portland cement and sand, see "Excavator" above.

Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3
Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0

Cement and sand, see "Excavator" above.

Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra .	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra .	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra .	0	0	10
WEATHER pointing, do. do. .	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup. . . .	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup. . . .	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each . .	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup. . . .	0	11	0
SLATE DAMP COURSE, per ft. sup. .	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd. . .	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup. . .	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each .	0	0	3

MASON

MASON, 1s. 8½d. *per hour ;* DO. *fixer,* 1s. 9½d. *per hour ;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone :			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6

Cement and sand, see "Excavator," etc., above.

HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft. add 15 per cent.

PLAIN face Portland basis, per sup.	£0	2	8
DO. circular, per ft. sup. . . .	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup. . . .	0	4	10
JOINTS, arch, per ft. sup. . . .	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup. .	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run .	0	1	4
HALF SAWING, per ft. sup. . . .	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed .	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup. . .	0	1	6

SLATER AND TILER

SLATER 1s. 8½d. *per hour ;* TILER, 1s. 8½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200 :						
Portmadoc Ladies				£14	0	0
Countess				23	0	0
Duchess				32	10	0
Old Delabole	*Med.*		*Grey*	*Med.*		*Green*
24 in. × 12 in.	£42	11	3	£45	1	0
20 in. × 10 in.	31	4	3	33	0	6
16 in. × 10 in.	20	18	0	22	4	9
14 in. × 8 in.	12	1	0	12	16	3
Green Randoms, per ton				8	3	9
Grey-green do., per ton				7	3	9
Green peggies, 12 in. to 8 in. long, per ton				5	13	9
In 4-ton truck loads, delivered Nine Elms station.						
Clips, lead, per lb.				£0	0	6
Clips, copper, per lb.				0	2	0
Nails, compo, per cwt.				1	6	0
Nails, copper, per lb.				0	2	2

Cement and sand, see "Excavator," etc., above.

Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal :

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med.	*Grey*		*Med.*	*Green*	
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square				3	17	6
DO., machine-made do., per square				3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.						
FIXING lead soakers, per dozen				£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square . . .				0	10	0
LABOUR only in laying slates, but including nails, per square . .				1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour ;* JOINER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds) :			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq. . .	£1	4	6
DO. *T. and G., 1 in., per sq.* . .	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in. .	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.* . .	0	2	6
DO., *African, per ft. sup.* . . .	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube . .	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube . .	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd. .	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq. .	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run .	0	0	4½
DO. 9 in. wide and over per ft. sup. .	0	1	2

[*continued on page* xxxiii

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ¾ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
To DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; 1 ABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£3	0	9
Linseed oil, raw, per gall.	0	4	6
DO., *boiled, per gall.*	0	4	9
Turpentine, per gall.	0	4	7
Patent driers, per cwt.	1	10	6
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	2	2	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	6
DO., *flat, per gall.*	0	15	6
DO., *paper, per gall.*	1	2	6
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2¼
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	3
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	5/32 in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch ..	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder ..	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—

BUILDING CONTRACTS OPEN

Unless the contrary is expressly stated, all deposits required for bills of quantities, etc., are returned on receipt of bona-fide tenders. The words "Fair Wages Clause" inserted in certain paragraphs signify that persons tendering must conform to a fair wages clause in the contract, which requires them to pay the rates of wages current in the district. Application for plans and particulars should be made to the address given at the end of each entry.

IRLAM, LANCS: HOUSES

May 24.—For erection of 140 houses—seventy at Cadishead and seventy at Higher Irlam—for the U.D.C. W. G. Codling, Surveyor. Deposit £2.

MALDON: HOUSES

May 24.—For erecting fifty houses in Mundon Road, for the T.C. The Borough Engineer, Municipal Offices, Maldon.

LUTON: SCHOOL

May 24.—For erection of a Council school in Denbigh Road, Luton, for 1,315 children, for the T.C. The Education Secretary, 3 Manchester Street, Luton. Deposit £3.

ILFORD: HOUSES

May 24.—For erection of 146 houses, together with the necessary house drains, at the Fencepiece Road housing estate, Barkingside, for the T.C. L. E. J. Reynolds, Borough Engineer, Town Hall, Ilford. Deposit £5 5s.

BOLTON: BUILDINGS

May 24.—For the erection of (1) new sessions hall and police building: (2) library, museum and art gallery; (3) extensions to the existing town hall, proposed to be erected on land in Victoria Square, Bolton, for the Bolton Corporation. Samuel Parker, Town Clerk, Town Hall, Bolton. Deposit £5.

WOLVERHAMPTON: COLLEGE

May 24.—For the erection and completion of a large new technical college in Wulfruna Street, Wolverhampton, for the Wolverhampton and Staffordshire Technical College. The building will be a three-story block, having an aggregate floor space of approximately 58,000 feet super. T. A. Warren, Clerk to the College Governors, Education Office, North Street, Wolverhampton. Deposit £10 10s.

WHEATLEY, DONCASTER: HOUSES

May 26.—For the construction of twenty-three houses at Wheatley, for the Doncaster R.D.C. F. O. Kirby, Borough Engineer, 2 Priory Place, Doncaster. Deposit £5 5s.

LONDON (PADDINGTON): DEMOLITION

May 26.—For demolition, etc., works and reconstruction of wharf building and contingent works at the southern end of No. 26 wharf, 175 Harrow Road, W.2, for the Paddington B.C. The Borough Engineer, Town Hall, Paddington, W. Deposit £1 1s.

LIMERICK: BRIDGE

May 26.—For the construction in reinforced concrete of a new bridge, 187 ft. between abutments and 36 ft. between parapets, carried on piled foundations, together with the construction of an embankment of approximately 250 lineal yards of approach roads and other contingent works, for the Limerick County Borough Council. J. J. Peacocke, Town Hall, Limerick; or J. J. Roughan, 7 and 8 Lower Abbey Street, Dublin. Deposit £5.

LONDON (CHELSEA): TELEPHONE EXCHANGE

May 27.—For erection of "Kensington" telephone exchange in Draycott Avenue, Chelsea, S.W., for the Commissioners of H.M. Works, etc. The Contracts Branch, H.M. Office of Works, King Charles Street, London, S.W.1. Deposit £1 1s.

CLEVELEYS: LIBRARY

May 28.—For erection of a branch library at Cleveleys, for the Lancashire E.C. Stephen Wilkinson, County Architect, 16 Ribblesdale Place, Preston. Deposit £2.

BOSTON: HOUSES

May 30.—For the erection of 112 houses on the Fenside Road housing site, for the T.C. D. G. Cockrill, Borough Surveyor, Municipal Buildings, Boston, Lincs. Deposit £2 2s.

WINCHESTER: HOUSES

May 30.—For erection of 132 houses at Milland Road, Bar End, Winchester, for the T.C. P. H. Warwick, City Engineer and Surveyor, Guildhall, Winchester. Deposit £2 2s.

STROUD: COTTAGES

May 31.—For erection of sixteen non-parlour type cottages at Cashes Green, and eight cottages of the same type at Brimscombe, for the Stroud R.D.C. R. Bird, Surveyor, Council Offices, Kendrick Street, Stroud, Glos. Deposit £2 2s.

ALTON: BUILDINGS

May 31.—For the erection of new hospital (timber and corrugated iron) and covered way and alterations to existing buildings, and preparation of site and construction of foundations for same, for the Alton Joint Hospital Committee. G. H. Webb, Surveyor, Town Hall, Alton. Deposit £1 1s.

LOCKERLEY AND BRAISHFIELD, HANTS: COTTAGES

June 2.—For erection of sixteen pairs of non-parlour-type cottages in the parishes of Lockerley and Braishfield on the following sites, for the Romsey R.D.C.: Four pairs on the site adjoining the East Dean Road, Lockerley; two pairs on the site opposite Butts Green, Lockerley; three pairs on the site adjoining Cooks Lane, Lockerley; four pairs on the site adjoining the Carters Clay-Newtown Road, Lockerley; and four pairs on the site at Common Hill Road, Braishfield. C. W. P. Dyson, Surveyor, Porters Bridge Street, Romsey. Deposit £2 2s.

ORPINGTON, KENT: HOUSES

June 5.—For erection of sixty-four houses on the following sites, for the Bromley R.D.C.: Pratts Bottom, Chelsfield, twelve houses; Jail Lane, Biggin Hill, Cudham, eight; Cudham Village, four; Westerham Road, Keston, eight; Upper Ruxley, North Cray four; Homefield Rise, Orpington, eight; Millfield, St. Mary Cray, eight; and Crabbs Croft, West Wickham, twelve. The Building Surveyor, Council Offices, Orpington. Deposit £2 2s.

HEMEL HEMPSTEAD: HOUSES

June 10.—For erection of seventy-two houses, in pairs, in St. Paul's Road, for the Corporation. A. Murray-Smith, Borough Surveyor, Market Square, Hemel Hempstead. Deposit £7 7s.

CAIRO: PUMPING STATIONS

August 17.—Tenders are invited by the Mechanical Department, Ministry of Public Works, for supply and erection in the Isolated Basins, Aswan Province, of fifteen electric pumping stations, complete with all the necessary building work, pumps, motors, switchgears and pump-houses, etc. The Chief Inspecting Engineer, Egyptian Government, 41 Tothill Street, S.W.1. Copies of the conditions, etc., are obtainable at £10 5s. per set, which sum is not returnable.

MEASURES BROS. 1911 LTD.

Section Sheets and Estimates on Application.



Telegrams: "Measures, Boroh, London."

STEEL JOISTS

Structural Steelwork — OF — Every Description.

Prompt Delivery from Stock at Lowest Market Prices.



Telephone No.: Hop 3985 (4 lines).

SOUTHWARK STREET, LONDON, S.E.



CHANCEL GATES IN WROUGHT IRON, GILT
AT
ALL SAINTS' CHURCH, VALESCURE, FRANCE

Designed by
H. S. GOODHART-RENDEL

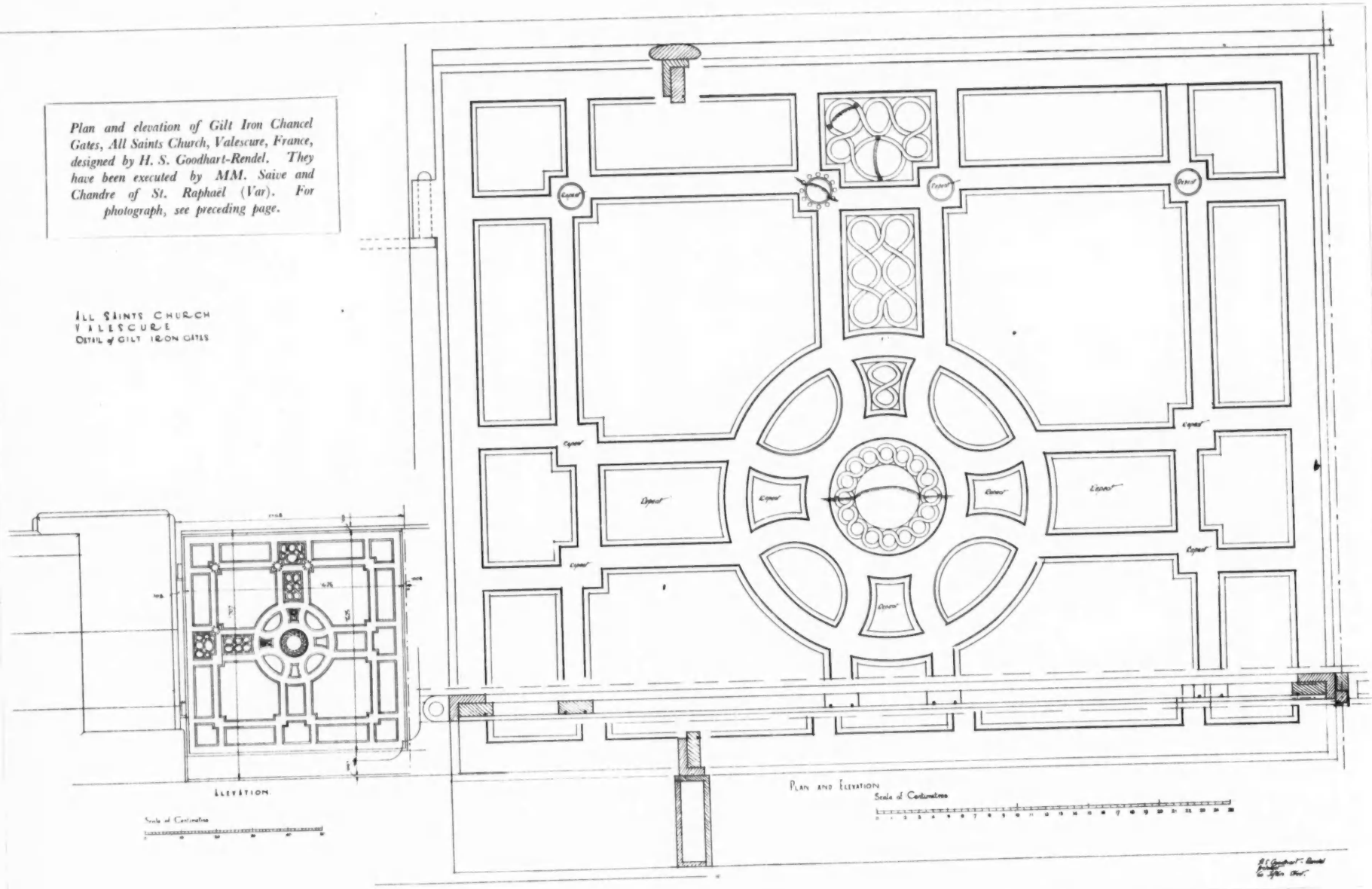
THESE gates close the opening in a marble wall that connects the ambones at the entrance to the chancel of All Saints' Church, Valescure.

The church was built about thirty years ago in a semi-Byzantine style; and in the recent remodelling of the chancel a Byzantine flavour has been given to the modern style in which the new work has been conceived.

Each gate is made from a pierced plate of iron, filled in and ornamented as shown by the photograph and the large- and small-scale drawings reproduced overleaf. They are gilded all over.

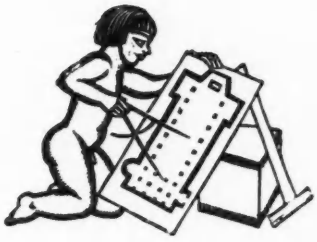
They were made by MM. Saive and Chandre, of St. Raphael (Var), from full-size drawings by the architect.

Plan and elevation of Gilt Iron Chancel Gates, All Saints Church, Valescure, France, designed by H. S. Goodhart-Rendel. They have been executed by MM. Saive and Chandre of St. Raphaël (Var). For photograph, see preceding page.



From next week onwards architects' details published on this page will be specially drawn and reproduced to scale. This will enable the reader to place his office scale on the page and read it like an ordinary drawing, instead of, as with the present series, using a pair of dividers.

THE ARCHITECTS' JOURNAL



WEDNESDAY, MAY 28, 1930

THE IDEAL R.I.B.A. JURY

Five Assessors, to Stand for:

Experience in Competitions — *The English Classic Tradition*
The Imperial Point of View — *An Essentially Modern Outlook*
Distinguished Lay Opinion

IN no foreign country has the competitive system for architects attained such popularity or worked so well as it has in England. And it is shortly to be put to the supreme test. Is it capable of giving us an acceptable design for the new home of the Royal Institute of British Architects itself?

This building, to be erected in Portland Place, is going to be much criticized, not only by Englishmen but by our professional brothers from abroad; so we may be excused if we are all feeling very nervous about it. What if we make a laughing-stock of ourselves by accepting a design which is so conservative, so *timid*, that none of the most original and vigorous-minded architects in the country will have pleasure in it?

On the other hand, we may imagine an even worse situation—one in which the lust for novelty has found a most improper expression, with the result that a design, acclaimed this year as of the latest fashion, is, five years hence, utterly *passé* and condemned not only by defenders of tradition but by the "modernists" themselves, who by that time will have passed on to something more "fashionable" still. Let there be no mistake about it; if by any chance the new R.I.B.A. building were to be designed in a style which did not "wear," the R.I.B.A. would retire from that building *broken*. If, therefore, any architectural occasion demanded caution, this is the one. The penalties for too much caution would undoubtedly be severe, but the penalties for launching rashly upon an uncharted architectural sea would in this instance be disastrous.

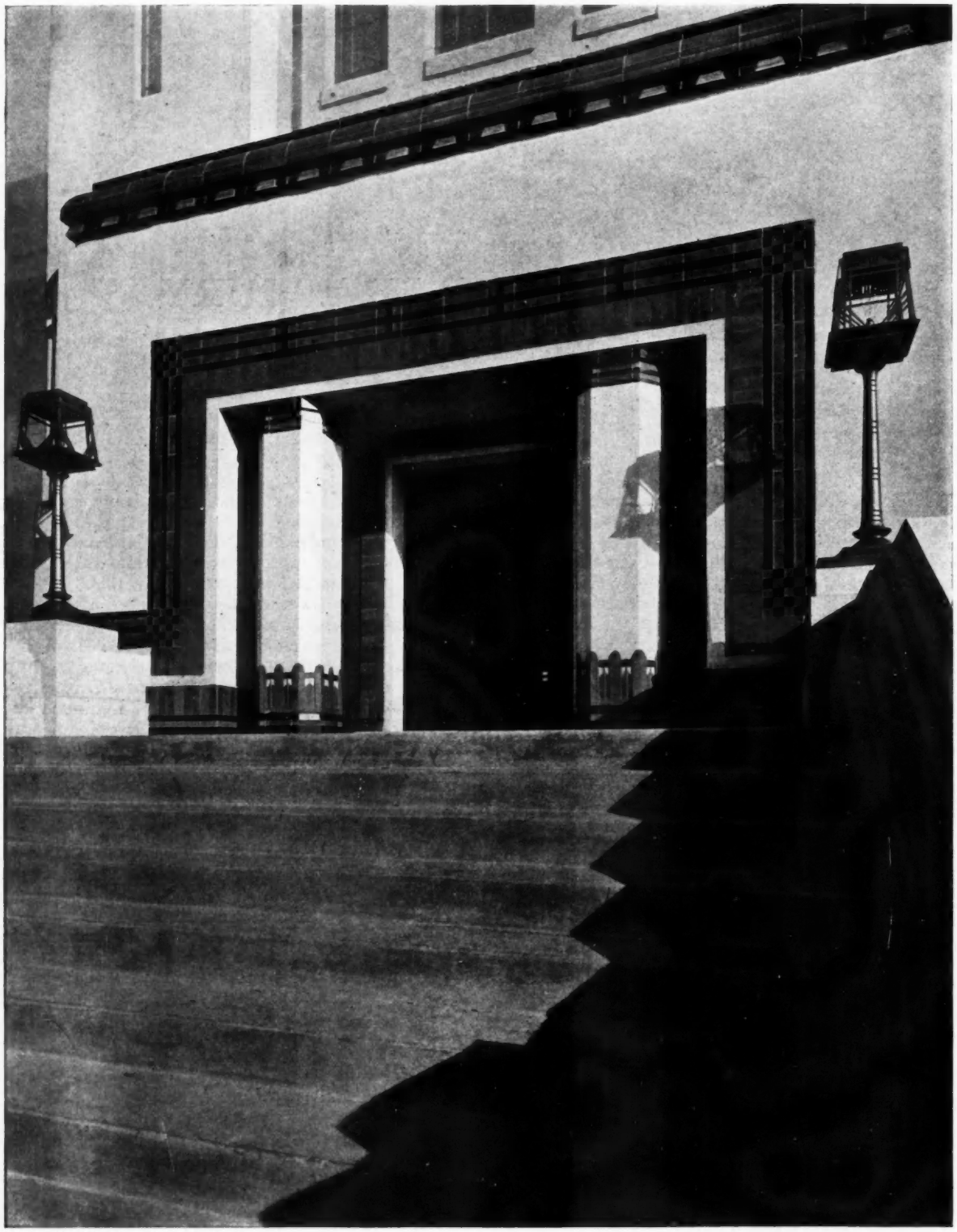
Everything rests with the assessors of the competition. As the choice of these is all-important, it seemed to us desirable to issue a questionnaire to our readers in order to have the benefit of their judgment upon this matter. The response has exceeded our best expectations, and on another page we analyse the nomination forms which those especially interested in this competition have been good enough to fill in. We are now in a position ourselves to make, with all respect to the Competition Committee of the R.I.B.A., a suggestion which embodies some of the proposals put forward by our correspondents.

Of the five members of the jury, it seems desirable that one should represent competition experience, a second, the Imperial point of view, a third, a respect for the English Classic tradition, and a fourth, an essentially modern outlook. This leaves one vacancy on the jury, which might usefully be filled by a distinguished layman. Several advantages might accrue from this last appointment. Certainly, it would be counted an act of grace, inasmuch as it would symbolize a respect for public opinion and a desire to establish genial relations between the architects who are destined to use the new R.I.B.A. building and that much-abused but often very distinguished person, "the man in the street," who has to look at it from the outside.

What kind of a building do we want? The answer is generally given in platitudes—we want a good building, a logical building, a "modern" building, and so on. It is in the interpretation of the word "modern" that acute differences of opinion arise. If to be modern means to break altogether with tradition, many of us will oppose this kind of modernity; but if it means that we are to stand on top of the ages and add something new and true to what is old and true in our architectural knowledge and experience, then we can all be "modernists."

Of one thing we may be certain. The new R.I.B.A. building will be excellently planned. Nobody can have surveyed the result of recent architectural competitions without being aware that the standard of planning achieved by English architects today is admirable. In questions of style, however, we are still at sixes and sevens. We must try to find relief in accepting "the greatest common measure" of the most reputable styles now current, and hope that if the R.I.B.A. building represents no less than this, its design will at least deserve the intellectual respect of our successors.

From time to time we shall ask the reader to place his office scale on the page and read it like an ordinary drawing, instead of, as with the present series, using a pair of dividers.



A GATEWAY OF INDUSTRY IN A RAINBOW OF COLOUR.

The main entrance to the new factory for the Pyrene Company on the Great West Road, like the principal façade itself, is a striking essay in white cement and highly-coloured faience. It is approached by a double sweep of steps and surmounted by a tower, the whole forming the dominant feature of the main front. The factory is designed by Wallis, Gilbert and Partners, and will be officially opened today by Lord Brentford. Further illustrations, the ground-floor plan, and a description, appear on pages 818–820.

NEWS & TOPICS



Erich Mendelsohn, lecturer and dinner-guest in London last week.



G. Grey Wornum, new President of the A.A., Dr. Mendelsohn's hosts.



P. G. Freeman, Liverpool student and new Fellow of Yale University.

THE MENDELSOHN DINNER

THE Seventeenth Dinner of the Architecture Club, given in honour of Dr. Erich Mendelsohn at the Savoy Hotel last Thursday, was as memorable for an unusually excellent menu and much accomplished after-dinner oratory as for Dr. Mendelsohn's plucky address in English. To watch the impassivity of the real authors of the re-decoration of the Abraham Lincoln Room —and most notably of the lady to whose deft touch so much of its soft harmony and discreet gaiety is due—when the Chairman blandly attributed its transformation to Mr. Clough Williams-Ellis was as fine a display of British *sang froid* as one could wish to see. Mr. J. C. Squire has seldom been in happier or racier vein than when he described the profound resentment with which old-fashioned mortals like himself heard blatant Youth knocking at the door : smashing off the lock and kicking in the panels would perhaps be a more accurate, if less literary, metaphor. After him, Sir Banister Fletcher, typifying all that is most officially academic about " the door," and suavely ignoring its splintered condition, was positively conciliatory to " the raw, unformed young creature."

★

Sir Owen Williams, who began by declaring that he wanted to talk about nothing but concrete, strained altruism to the point of entirely avoiding the subject, except for saying that it would be impossible to construct any building he had designed in it in any other material. This, rather than any personal preference of Professor Einstein's, was the reason why Dr. Mendelsohn, and not himself, had been chosen to build the Einstein Tower. The definition of architecture as " a lithic language " had resulted in shams like those rusticated stone arches in Regent Street, which would fall down were it not for the support of the steel girders they cloak (an assertion that was flatly controverted by an eminent engineer on my right).

★

He next proved incontrovertibly that the ratio of bricklayers to architects (surveyors, auctioneers and estate agents were presumably included in the latter category) was now three to one ; while in the case of masons it was approximately one to one. Seeking for an explanation of the mystery of how architects managed to live—since the profession, with impressive solidarity, has always denied that they either can or do—he had found it in the frenzied zeal with which at, or about, superannuation age, they hurl aside the T-square to snatch up the pen. Sir Owen might have continued his devastating statistics by showing the ratio of writers on architectural subjects to publishers of architectural books. It was with an audible sigh of relief that the Principal of the A.A. saw this speaker sit down. I left buoyed up with the realization of the highly remunerative nature of architectural criticism, and kicking myself for my crass stupidity in never having so much as suspected it. I rather fear Dr. Mendelsohn may carry away the impression that as a nation we are never more incurably flippant than when nominally engaged in the technical discussion of burning problems of the day.

WHAT WE CELEBRATE IN WEDGWOOD

At this time we celebrate the bi-centenary of Josiah Wedgwood, most famous of English potters. As architects we remember that he completed the full circle of eighteenth-century taste by giving to the beautiful tables, the niches and cupboards of the period, pottery suited exactly to its refined classical figure. Wedgwood found pottery in Staffordshire a rough home-made affair of salt glazes, and left it, after a life of terrific and minute energy, a world-known industry making a great variety of the loveliest common crocks we have ever known, and, of rarer objects the less lovely but more remarkable pieces of jasper and basalt ware, closely modelled upon the classical vases which contemporaneous discovery had presented to his interested world.

★

What should be particularly important to us today is the fact that Wedgwood was a business man who exploited the taste of the time *by co-operating with the best artists and sculptors he could find.* In this he was an artist himself as some few—but as yet too few—business men are today. We shall find our Wedgwoods today among the men who

make fabrics and furniture. Let us honour them by making their wares fashionable. Let us also honour the present representatives of Josiah Wedgwood, for they make new wares that are beautiful but cheap.

ROBES FOR ARCHITECTS ?

Events like the yearly Presentation of Degrees by the University of London take on a brilliance and decorative effect which perhaps only academic robes can provide. In considering the psychological value of robes, one wonders whether, when the R.I.B.A. move into new and more impressive headquarters, the subject of a distinctive dress for architects will be brought up again. At public functions the architect cuts a comparatively neutral figure, while other professions express their status and their corporate dignity by special robes. It has been hotly argued that architects do not need dressing-up, and that it would be out of keeping with their notoriously modest character. Yet the fact remains that in the public mind " dress does make a difference "; and while gaudiness may be out of place, some distinctive form of robe may yet be evolved for ceremonial occasions which would be at once quiet, distinguished and in accordance with the characteristic attributes of the profession.

SCHOOLBOYS' ARCHITECTURAL CLUB

From Stowe, the newest of the public schools, comes a copy of the rules and aims of a society that calls itself The Vitruvians. The member's ticket, decorated after a charming eighteenth-century architectural manner by Mr. Rex Whistler, discloses that the members of the society give themselves to the study and appreciation of architecture. That such a society should be formed among the boys of this public school is another indication of the renewed interest in architecture among intelligent people, and an example that might well be followed by other schools. This society will find, if it is careful to keep the boundaries of its study as wide as possible, that it has opened the door upon limitless inquiry, packed with interest and long enjoyment.



The cover of the member's ticket of the new Architectural Society at Stowe School, designed by Rex Whistler.

THE CALTON JAIL SITE

Lord Londonderry's rash words at the Architecture Club last year are bearing their fruit in due season. News has come from Scotland that the Office of Works has decided to drop its plans for the development of the Calton Jail site in face of a very critical attitude adopted by the Royal Fine Arts Commission for Scotland. Mr. Lansbury explained in December last how the decision to entrust the plans to the Chief Architect had been made by his predecessor, and that there was no other alternative but to allow the work to proceed. He promised, however, that the drawings and a model should be placed before the Royal Fine Arts Commission for Scotland and the Edinburgh Corporation. This has now resulted in an adverse report from the Commission, and a decision to reconsider the matter in principle. It seems likely that the plans will be thrown open to public competition, and we may congratulate ourselves that for once the weight of the architectural profession has been applied at the right moment. An early decision will be arrived at in view of the pressing need for accommodation for Government officials in Edinburgh.

HENGISTBURY HEAD DEVELOPMENT SCHEME

Bournemouth is not likely to lose by spending over twenty-five thousand pounds on the acquisition of Hengistbury Head. Although the generosity of Mr. Gordon Selfridge has already saved the town some part of the real value of the site, the figure is a large one to spend upon the purchase of an open space. It is stated that some seventy or eighty acres out of the 400 odd will be available for building development, and the rest of the fine heather-covered head, with all its dim historic association with Hengist the invader, and with its memories of smuggling, will be given over to public use. What development is allowed should be made under the strictest possible control. Half-timber would be defeat after victory.

THE CAUSE OF SHEFFIELD'S " TAME " ARCHITECTURE

Mr. Charles M. Hadfield of Sheffield and his colleagues are so concerned—and not without reason—about the problem of " tame " architecture as it has arisen in that town that they have gone to the trouble of examining the causes of Sheffield's artistic barrenness in detail. From a written statement of great pertinence and some length, which he has sent me, I extract the cardinal point. It is, he thinks, the nearly complete official monopoly of architectural work over a long period of time that is one of the dominant factors. This monopoly has tended, he says, to increase to such an extent as to make Sheffield unique among provincial towns, where, generally speaking, a certain amount of co-operation between officialdom and private practice is possible, and there are certain limitations to the scope of a city architect's activities.

★

It is, of course, perfectly true of many towns that whatever can be given to the official architectural department is looked upon as saving the town money, quite apart



Raeburn's portrait of John Rennie, sold last week by auction for 650 guineas.

from any considerations of quality; and the practice of adding a few more low-paid " ghosts " to do the added work keeps the wheels sufficiently oiled to make everything appear in order.

★

It is to be doubted whether the town really saves money by these methods. It undoubtedly gets as much as it gives in poorly designed, *tame* architecture, adequate but uninspired, and far, far removed from such lofty expression of free citizenship as one might expect to find in a public library or, indeed, in any building erected for the use of a democratic age.

RAEBURN'S PORTRAIT OF RENNIE

The advances made in the science of engineering during the last hundred years only heighten the experiment of the pioneers. Strange as it may seem, the real advance was the initial step, as for example the invention of the locomotive or the first iron bridge. Subsequent developments are but variations of what in the first place was a revolutionary project.

★

I am led to such thoughts by Raeburn's portrait of John Rennie, the celebrated civil engineer who built Southwark Bridge in iron as early as the year 1809. The story of his works in stone and granite is well known. He it was who designed the harbours of Kingstown, at Holyhead, the breakwater at Plymouth, and other works of vast scale. The portrait was sold by auction on Friday last. I do not know its destination, but anything painted by Raeburn is sure of a good home. Raeburn in his direct way caught the engineer in a typical mood. He is shown in full face, head and shoulders, a very civil-looking, broad-shouldered engineer. And a wealth of ideas was contained in that fine head. Primarily a millwright, he had intuition for machinery : as a mason he could cut stone and turn arches across narrow streams or wide rivers. His was the knowledge of inspiration bred of folk-lore craftsmanship and the hard necessity of his early life. Yet few questioned his skill in stereotomy or his power to carry a large contract to success.

TRAFFIC AT " THE ELEPHANT "

The Ministry of Transport has lately turned down the L.C.C. proposals for dealing with the traffic problem at the Elephant and Castle. These proposals suggested a wide circular road, which was objected to by the Minister on the grounds of the wide diversion suffered by the traffic from Walworth Road to Newington Causeway. The Minister's counter-suggestion proposed a wide semi-circular road to the west of these two roads, at an additional cost of £37,000 on an estimate of nearly two million pounds.

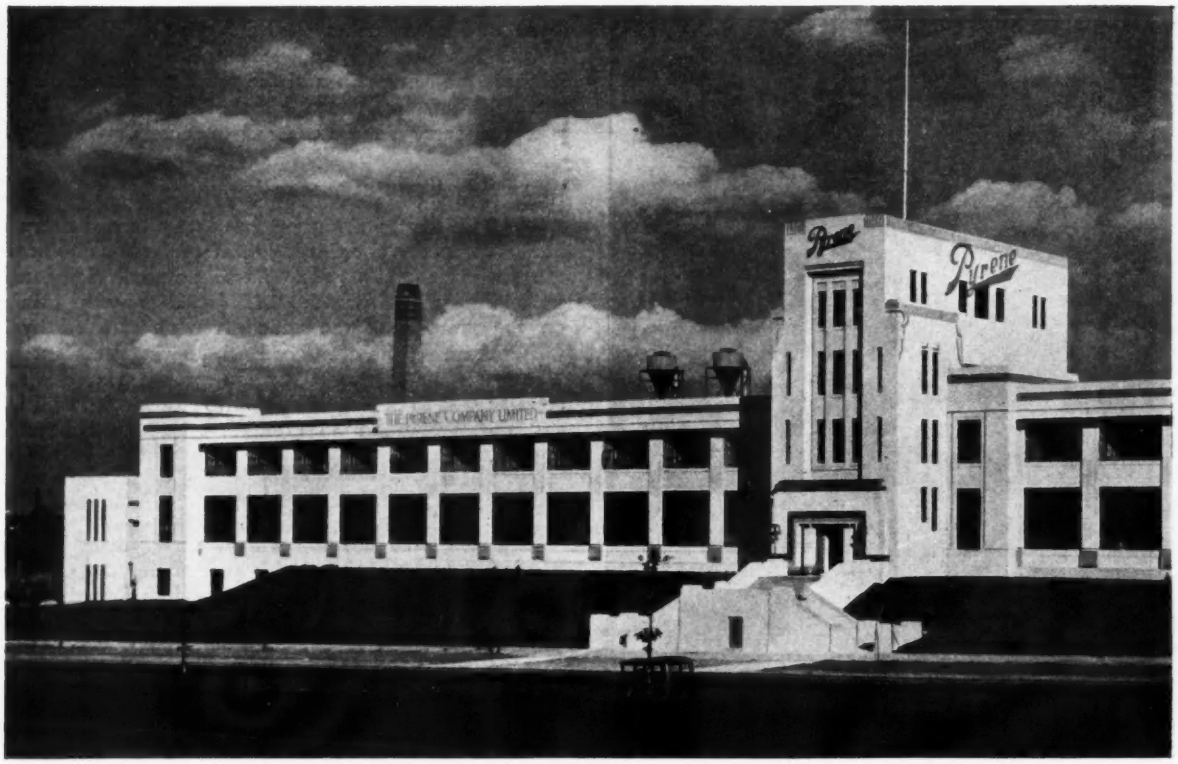
FELLOW OF YALE UNIVERSITY

Philip Garforth Freeman, winner of the only architectural fellowship to be awarded this year under the Commonwealth Fellowship Fund, which provides for scholarships tenable at certain American universities by candidates of British descent, has opened his career brilliantly. Winning a Derby County Council scholarship to the Liverpool School of Architecture, he proceeded to carry off the Holt Travelling Scholarship, the Rankin Prize and the White Star Prize, besides taking the degree of B.Arch. with first-class honours in design, and being finalist in the Tite Prize and Soane Medallion Competitions. Most of Professor Reilly's fourth-year students go to America; he went, instead, as assistant to Sir Herbert Baker. Upon leaving the Liverpool School he assisted Minoprio and Spencely, two ex-students of Liverpool, and is at present with Joseph Emberton, designer of the new Olympia. By the award of a fellowship in architecture at Yale University, he now has the opportunity of repairing the transatlantic gap in the curriculum normal to Liverpool schoolmen.

WHO IS LORD BENBOW ?

A correspondent wants to know whether there is any relationship between the present Lord Benbow, who has suddenly sprung into fame, and the Admiral who distinguished himself at St. Malo and Dunkirk. Frankly, I do not know. I know very little about Lord Benbow, except what I have read in the May *Architectural Review*. The barony is, I believe, a recent creation—very. In fact, I don't mind admitting, if you really press me, to a suspicion that it was created on May 1 last—by the Editor of that famous journal. The question whether Lord Benbow is a real or an imaginary person does not, however, seem to count for very much with the architects and decorators with whom I have recently been discussing the decoration of his flat " not far away " from Curzon Street. I must mention no names, but three or four of the very first rank appear to be at work on schemes for that big double room, the contents of which are to be exhibited at Messrs. Waring and Gillow's. If all their colleagues are equally keen (and I have no reason to doubt that they are) the competition promoted by the *Review* will turn out to be the biggest stimulus the modern movement has yet received in this country.

ASTRAGAL



A general view, taken from the forecourt of the Firestone factory, an earlier achievement of Wallis, Gilbert and Partners. The focal point in the design of the new building is the central entrance tower, with the name Pyrene emblazoned on its summit. The façade is decorated in faience in the gayest



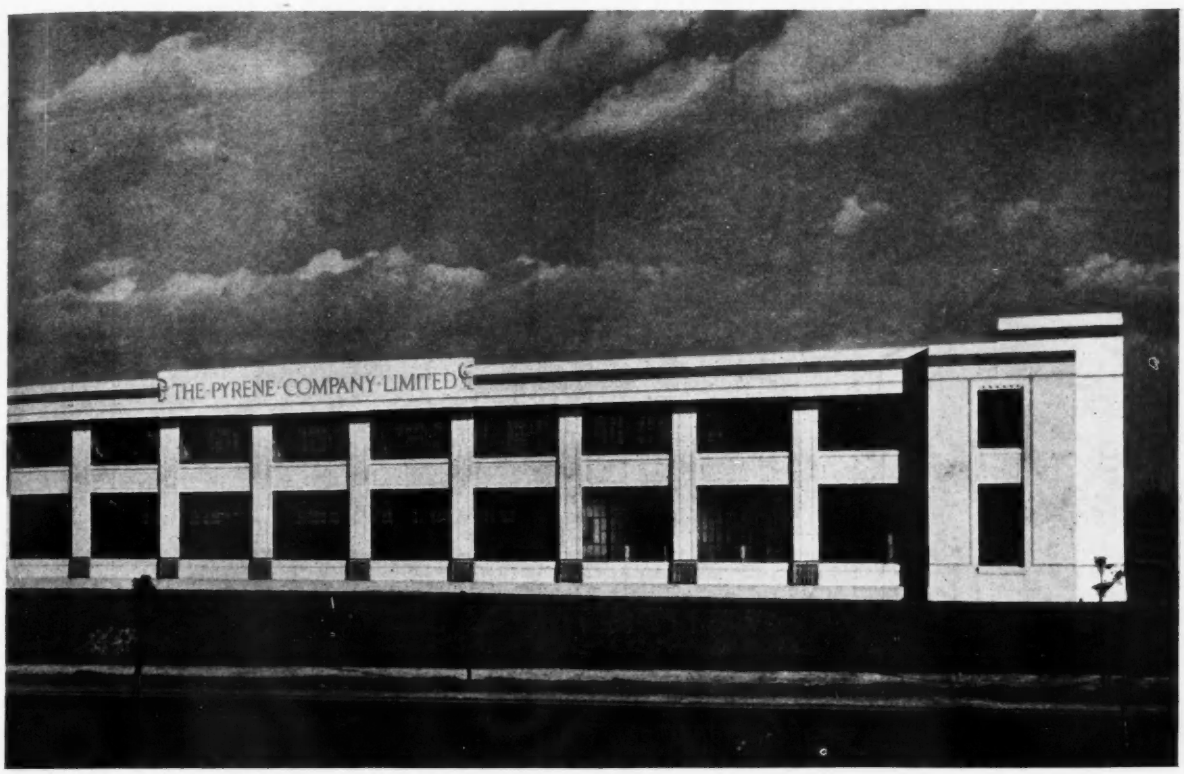
In the central tower are the main entrance, and, above it, the windows of the staircase, which gives access to the administration offices, etc. A photographic study of the main entrance appears on page 814.

THE PYRENE FACTORY:

DESIGNED BY

TODAY the new factory erected for the Pyrene Co., Ltd., on the Great West Road, will be officially opened by Lord Brentford. It is the first modern building to be specially designed mainly for the manufacture of fire extinguishers and such-like appliances. The employees enter by a spacious hall on the lower ground-floor, and situated at the end of the building near the works entrance gates. From this hall a staircase provides the approach to all works departments. This staircase opens into a straight wide corridor serving the whole of the building, and incidentally effecting substantial economies in time-saving and supervision. An adjustment of the floor levels by the architects has made it possible to light and ventilate the big ground-floor units on both sides. There is not a dark corner in the whole building, and there is no single section which is not smoothly organic in its individual layout and its relation to adjoining units.

Many details have been incorporated in the building to facilitate service and add to amenity; the provision, for example, of chromium-plated drinking fountains at intervals along the corridors, and a system of call bells enabling calls for individuals to be transmitted simultaneously to all parts of the building. A healthy and comfortable atmosphere is maintained by a constant supply of fresh air, drawn in through a number of intakes, producing a cooling effect in hot weather. In winter the air can be warmed by steam-heated coils fitted within the ventilation ducts. Central



contrasts of green and red: green to respond to the colour of the sloping front lawns; and red, the symbolic colour of the company, whose productions are largely devoted to fire protection. The employees enter through a pair of gates, overlooked by a small lodge, at the easterly, the left, end of the building.

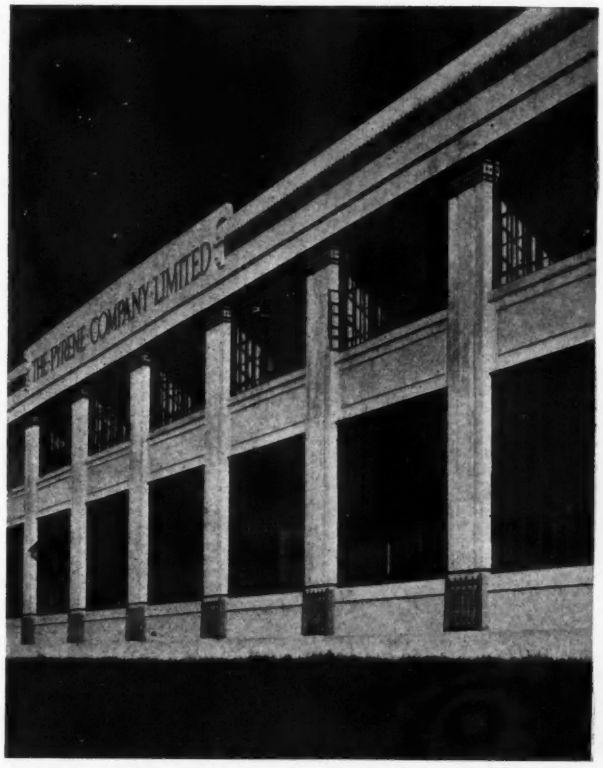
GREAT WEST ROAD, W.

WALLIS, GILBERT AND PARTNERS

heating is supplied throughout the building from boilers, which also provide the steam necessary for the various manufacturing processes.

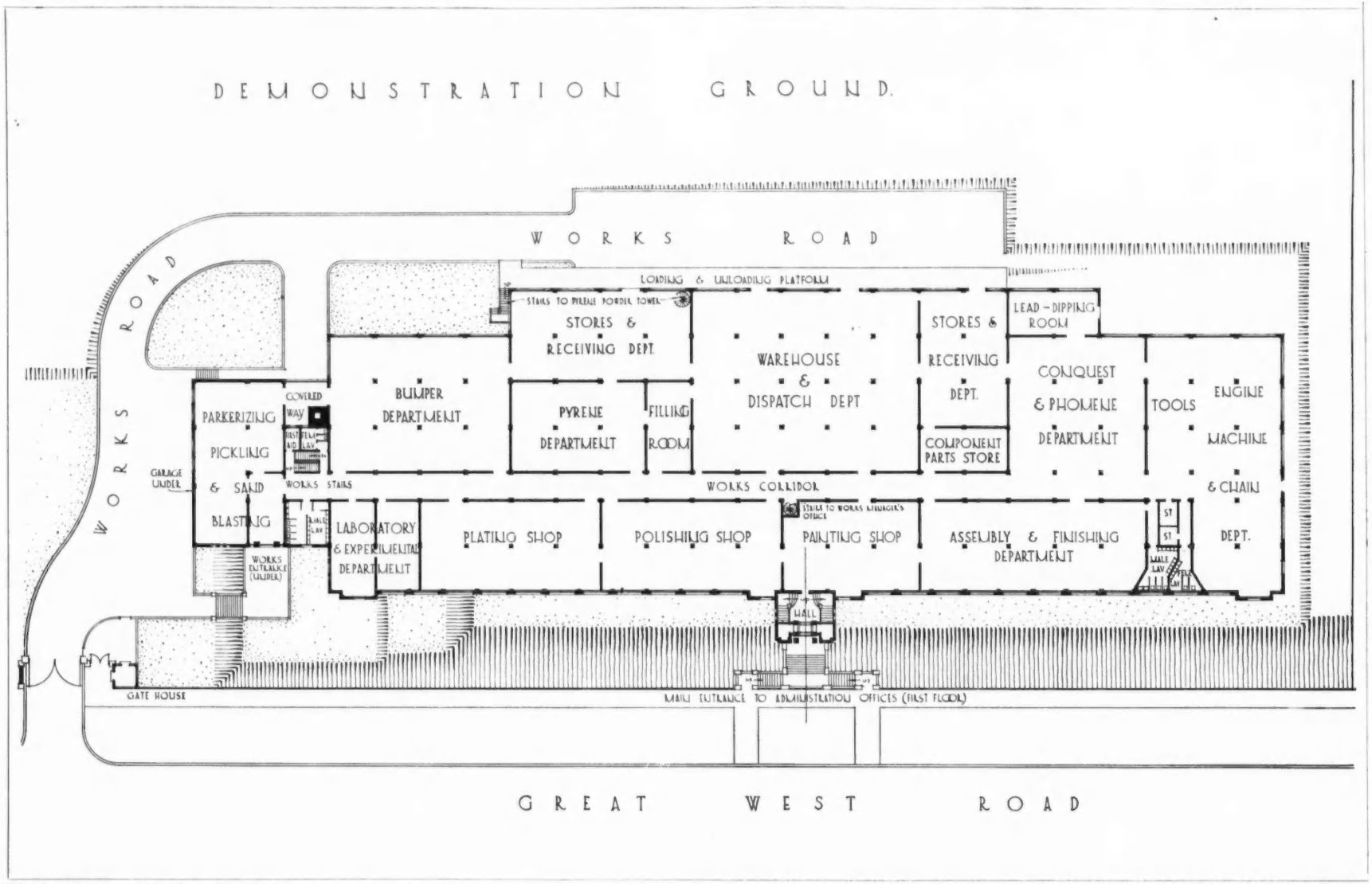
The principal staircase leads direct to the first floor from the entrance hall and vestibule, which are themselves at a considerable elevation above the Great West Road, and are approached by a double sweep of steps. The staircase hall is enriched by a modern chandelier of moulded glass, and is decorated in a note of modernity. On the far side of the first-floor vestibule, and commanding the approach from the main staircase, are the telephone exchange and enquiry office. From this central point, stretching away to either end of the building, is the long administrative corridor, painted in green and grey. At the western end is the board room, decorated and inlaid with selected woods.

On the first floor also is a spacious tiled canteen with a silveroid buffet. Here, at the eastern end of the building, is provided dining space for over 200 employees. Although the windows occupy a large portion of the wall space in this canteen, they may be darkened in a few seconds by mechanically-operated blinds, when the hall is converted into a cinema. The kitchens and services are fitted with the latest appliances of hotel and restaurant type, and communicate by pantry, not only with the staff canteen, but with the directors' private dining-room. Among the important safety devices used in the building is a non-slipping tile inserted in the treads of the staircases.



A portion of the easterly wing, looking from the steps leading up to the main entrance. The factory is provided with an unusual expanse of window space; thus the interior contains no dark corners.

C



The Pyrene Factory, Great West Road, W.] *[By Wallis, Gilbert and Partners.*

Ground-floor plan. The building has a main frontage of 480 ft. and stands on a higher level than the road. The main entrance leads into the hall, in which are the staircases to the administration offices on the first floor. At the easterly end of the site are the gates, with gate-house, giving access to the works entrance and garage on the lower ground-floor, and to the roadway leading to the loading and unloading platform at the rear of the building. The demonstration ground has been laid out to enable the research work carried out in the laboratory to be tested under practical conditions without danger or inconvenience.

A Sequel to the Honeywood File

SETTLING-UP HONEYWOOD

BY KARSHISH
(H. B. CRESWELL)

It is with the greatest pleasure that the editor places in the hands of readers of THE ARCHITECTS' JOURNAL *the first instalment of new building adventures of which Honeywood Grange is again the scene and centrepiece. The new series is, he thinks, likely to be more valuable even than its predecessor.*

Introduction

THE HONEYWOOD FILE, which appeared serially in these pages last year, purported to be a correspondence file from the office of a young London architect, dealing with the building of a house. Although the work, both as regards persons and events, was pure fiction, and presented a picture of which the colours were somewhat brighter than life, its purpose was to enhance verisimilitude; and since the whole of its value and much of its interest depended upon acceptance of the picture as a true one, the author's chief concern was to make it so, and to establish the reader's confidence in the singleness of his purpose.

The same explanation is offered and the same claim is made for the present writing, which is, in fact, a continuation of *The Honeywood File*. That, it will be remembered, ended when the folder would hold no more letters; and the circumstance that the last letter coincided with the completion of the house was merely an example of author's luck : the last sheet of the file was no more than the last page of a chapter, for if the business of building a house ended with the leaving of the workmen, this world would be a much happier place than it is for owners, for architects and for builders, and grey hairs would be fewer in many heads.

In the closing commentary of *The Honeywood File* it was mentioned that somewhere in the architect's office there must certainly be a second Honeywood file; and that file, marked *Honeywood II*, is now before us. Its bulk is ominous. Unless his ineradicable habit of writing unnecessary letters and provoking unnecessary replies, which in turn call for unnecessary answers, is accountable for these bulging contours, James Spinlove, A.R.I.B.A., seems to have had a devil of a time of it.

What this letter-writing is about may readily be guessed. The builder's statement of account has still to be rendered, and this is likely to include unauthorized extras, and to raise questions of fact long gone out of memory. Then, when the architect has settled matters with the builder and agreed a final figure, he has to acquaint the owner with unappetizing facts and reconcile him to those extra charges which are the penalty for his interferences and to those other extras imposed upon him by the oversights, mistakes or afterthoughts of his architect. There is also the vexed question of the defects which, in greater or less degree, manifest themselves in every new building. These, so far as they may appear within a certain time and are due to improper workmanship or materials, the builder has to make good under the terms of his contract; or, so far as they are due to errors of omission or commission amounting to negligence on the part of the architect, the architect is responsible for, under his. Lastly, there is the architect's account for balance of fees due. As this account includes items for expenses and disbursements, and special charges for work additional to that covered by the fee of six per cent. on the total cost (such as the making of new drawings, at the owner's instructions, to replace those already supplied, or negotiating boundaries and so forth), and as these expenses and charges are based on the architect's status and style of living and the cost, to him, in time and trouble, and are to be justified only by their reasonableness, it sometimes happens that owner and architect discover, perhaps for the first and only time, that their ideas of reasonableness differ surprisingly.

One discerns, in fact, that this second file is likely to be more disturbing of peace of mind than was its predecessor : the architect's joy in creation and the owner's in realization can find no place in it; its triumphs can be no more than the overthrow of difficulties. No matter ! The battle—as always—is to the strong; and the record of victory or defeat, and the clash of personalities, is always enlivening. As a poet of my acquaintance once wrote with (for him) unusual discernment :

> Life is the same old life
> That it hath ever been.

When I peep into the bulging folder I notice Sir Leslie Brash, the owner, Marston Grigblay, the builder, and, of course, the irrepressible Spinlove, all hard at it once more. Names new to me bulk largely; but Lady Brash is, I see, again on the job, and a most unkind fate has overtaken Bloggs, the foreman, by adding to his many duties that of précis-writer. Bloggs faces this hardship manfully with a crossed nib on the back of part of an old blue print.

We will not, however, spoil sport by looking ahead. I know only what every reader of *The Honeywood File* knows; namely, that James Spinlove, A.R.I.B.A., is involved in more ways than he is aware of. He has, for instance, given his client light-hearted estimates of the value of various bits of work, one of which—concerning the piping of a ditch—we know to have been quite wildly astray; and although the contract lays down that no extras shall rank unless the claim was made by the builder and accepted as an extra at the time the work was done, it does not appear that our architect has been particular to enforce the builder's observance of this rule. Spinlove is also unconscious that he has fallen into a trap set for him by the people who supplied the facing bricks, and who—with subtle ingenuity acquired by long practice—seem to have established a claim for extra payment in words that Spinlove read as signifying their withdrawal of that claim.

Spinlove certainly warned his client not to give orders direct to the builder's people, and laid such stress on the dangers of the extras that would attend any interferences with the work as to give that warning the character of a threat; but we know that Brash's attention to this excellent advice wandered, and it does not appear that Spinlove kept Brash informed, as he might have done, of the cost of various alterations his client from time to time ordered. We also know that when her Leslie was gunning in Scotland, Lady Brash began pulling down work that afterwards had to be restored—one of the least economical ways of building known to the trade. All things considered, the final statement of account is likely to leave Brash stunned : for the first time since our acquaintance with him he may find himself at a loss

Reading to the loading and unloading platform at the rear of the building. The demonstration ground has been laid out to enable the research work carried out in the laboratory to be tested under practical conditions without danger or inconvenience.

for words. If so, we may feel sorry for the poor man, but he will only have himself to thank.

Grigblay is so competent and honest a man, and in such high repute as a builder, that it is most unlikely any serious defects in his work will reveal themselves. He has, moreover, kept a friendly—if self-preserving—eye on Spinlove, and set him on the right path on several occasions when he was going astray. Both men, however, are aware of trouble promised by Brash's pig-headed insistence on the use of Riddoppo paint against his architect's advice and in face of the builder's objection. It is true that Spinlove, under Grigblay's tactful guidance, categorically dissociated himself from his client's decision, and that Grigblay only consented to use Riddoppo on the understanding that Brash accepted responsibility for the result; but, at the pinch, Grigblay can only escape responsibility by establishing that he used craftsmanlike skill in applying the paint, and Spinlove was remiss in not warning Brash—as, with greater experience, he would have done—of the disasters attendant on experimenting with untried materials. If, therefore, things go seriously wrong and Brash is recalcitrant, both Grigblay and Spinlove are likely to be in difficulties about the paint which, in fact, began to show defects before the house was occupied. Riddoppo, we learnt, is advertised in Tube lifts and elsewhere as a New Novelty Super-Paint, fire- and acid-resisting, proof against assaults of boiling water and superheated steam, and capable of receiving a high polish; but these rare merits have not prevented it from showing such a marked tendency to "creep," or flow downwards, that Grigblay, in a private letter to Spinlove—in which his incorrigible, ironic humour veils a natural annoyance—describes "Riddoppo Super" as getting ready to crawl out of the front door and off home.

Sir Leslie Brash, his wife Maude, and his daughter Phyllis—who for some extraordinary reason prefers to be known as "Pud"—occupied "Honeywood Grange," as Brash christened his new home, on February 10, 1926. The house stands on Honeywood Hill, four miles from Marlford, Kent. It backs upon a spinney through which the entrance-drive reaches the adjoining highway; and looks out over a terrace upon a fine prospect to the south, east and west, marred only by a pump-house chimney two miles away which reacts unfavourably on the nerve centres that serve Lady Brash for brains. It is a brick gabled house, with leaded lights in iron casements hung to solid oak frames; and we gather that the design has affinity to Tudor architecture. The oak floors and staircases, and the oak panelling and open brick hearths and fireplace-surrounds to the reception rooms are in sympathy with the same tradition. Spinlove was sorely galled when his client allowed the "eminent commercial gentleman," by whose persuasion Riddoppo came on the scenes, to direct the decorative scheme of the upper floors, where each room is painted a different colour, turning the house—as Spinlove said with bitterness—into a colour-cure asylum for lunatics. We are informed that the house is handsomely but not extravagantly finished, and that the contract price was £18,440. This does not include a temporary wooden garage, faced with larch slabs, thrust back among the trees, which Spinlove built in place of a reach-me-down bungaloid atrocity that Brash, without consulting his architect, had intended depositing near his front drive.

The last letter in the old file is written by Spinlove in acknowledgment of one from Brash, conveying his warm appreciation of the house and thanking his architect for the skill and forethought with which he has performed. It is dated February 14. The first letter of the new file belongs to the following week.

AUTHOR'S NOTE: *The characters appearing in these articles are without exception entirely imaginary, and are associated in my mind with no real persons, either alive or dead. The episodes are inventions.*

i: Signs of Damp Appear

JAMES SPINLOVE, A.R.I.B.A., TO MARSTON GRIGBLAY, BUILDER

Dear Sir, 23/2/26.

I should like your statement of account at once. When may I expect it?

Yours faithfully,

It is a pity Spinlove—like the rest of us—does not get his deserts, or he would receive by return a postcard bearing the words "Say, Please," and obtain great benefit from the hint. He is on the best of terms with Grigblay, who has taken great trouble to make the house a success and whose friendly help and advice he has acknowledged on several occasions and been indebted to on many more; so that this gracelessness is merely a habit with Spinlove when addressing those under his direction. It is a bad habit and one that has already got him into difficulties he might otherwise have avoided.

SIR LESLIE BRASH TO SPINLOVE

Dear Mr. Spinlove, 28/2/26.

I very much regret to have to intimate that my anticipations anent the windows at Honeywood appear to be now eventuating. You will recall that I previously communicated to you, on behalf of Lady Brash and myself, our strong preference for big sheets of thick glass in place of the little thin sheets all joined together with narrow strips, but you persuaded us to adhere to the present device. The consequent results are precisely what I anticipated. The rain percolates freely through the glass, which is *very thin, cheap glass*, and also, I apprehend, through the joints where it is connected by the little strips which are so weak that *iron bars* have in some cases been found necessary to fortify their strength. Every morning the maids have to remove the accumulated wet that collects on the new oak window-boards, which are exhibiting stains in consequence, and even runs over on to our new carpets! The situation of Honeywood Grange is excessively exposed to the weather, and it is clearly obvious that large continuous sheets of thick glass is the appropriate desideratum, as—if you will permit me to remind you—I previously prognosticated.

We continue to be delighted with the house and to appreciate the anticipatory forethought of its architect. We notice no signs of damp other than that above intimated except in the *boxroom* the outer wall of which was lately found to be *streaming with water*, and the domestic staff complain of wet marks near the ceiling over the fireplaces of their domain on the uppermost story.

I desire that you will intimate to Mr. Grigblay that these matters require immediate attention. There should be no difficulty in cutting the glass to appropriate sizes and effecting substitution of one pane at a time so as to avoid unnecessary exposure to the weather.

Yours sincerely,

Brash certainly takes these disasters in an accommodating spirit. He is evidently well satisfied with the house.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 1/3/26.

It is not possible, I assure you, for rain to beat through the glass quarries, which are not, as you suppose, unduly thin. Iron saddle-bars are essential to leaded lights. Large sheets are made thick for purposes of strength only. It is certainly possible for heavy driving rain to find its way in through the joints with the leadings, but this cannot be the case with your windows. Messrs. Watkins, who did the work, are most reliable people; and it happens that, knowing the house was exposed on the south and west, I spoke to their man on this particular point and found that he was already jointing the quarries to the cames, or leads, with a mastic stopping—a precaution not in ordinary found necessary.

I have no doubt whatever that what you describe is merely *condensation*. In a quite new house the moisture in the walls, due to the large amount of

water used in bricklaying, is continually being evaporated, and the warm air becomes charged with steam, which condenses on the cold surface of the glass. If the windows are left a little open the trouble will diminish, and it will entirely disappear for good and all with the summer.

The wet surface of the boxroom wall is due to the same cause. This is a solid wall, and the plaster was finished with an ordinary steel-faced float and so left. The window and door should be kept open for the next few weeks.

With kind regards,

Yours sincerely,

PS.—You will find that wet will collect on the windows when there is no rain, and moisture on the boxroom wall only pronouncedly when mild, humid weather immediately follows frost.

Spinlove is evidently informed by experience, or he could scarcely write with the assurance he exhibits, which, however, does not extend to the cause of damp in chimney breasts. It will be noticed he says nothing of this. The reasons he gives, and the advice he offers, are sound; but we may suppose that Brash has raised a great shout over a very small matter, for the conditions at Honeywood Grange are such as least favour condensation. The brickwork was built during the summer months and the outer walls are formed by a 4½-in. inner and a 9-in. outer wall, with a 2-in. space between, so that evaporation must be relatively small. In houses that specially favour condensation—such as those built in the winter and stuccoed or roughcast on the outside as well as plastered within, so that water is bottled up in the walls—the evaporation induced by the warmth of the occupied house is so considerable as to produce most disquieting conditions of damp. Water collects in puddles on window-boards and runs down walls to form pools on the floor below; and under such conditions of weather as that described in Spinlove's postscript, wallpapers covering outside walls may become soaked with water. Brash's boxroom is a mild instance of this phenomenon; and when Spinlove speaks of "steam," and mentions that this particular wall is built solid and its plastered face left as finished with a steel float, he gives the explanation of it, though Brash—who probably recognizes steam only as the vapour from boiling water (which is not steam), and has no idea that steam is invisible or that atmospheric air is charged with steam which comes into evidence as vapour or "condensation" only when pressure is reduced or temperature lowered—will not know what he is talking about.

The inner 4½-in. lining of a hollow wall speedily dries out and acquires a temperature approximating to that of the room, so that condensation cannot take place upon it. A solid brick wall, on the other hand, tends to retain its moisture and is therefore a better conductor of heat than a dry one; and, as there is no hollow space and insulating blanket of air, the warmth of the room is dispersed into and through the wall, which, in consequence, remains cold and invites condensation. If this boxroom wall had been papered—and in the degree that the paper was thick and porous—condensation would have been discouraged, and for the reason that explains Spinlove's reference to a steel float. A steel float gives a compact, smooth, polished finish to plaster, which promotes condensation by the abrupt transition of temperature presented at its surface; but a float faced with felt leaves an open grain behind it: the air invades the interstices of the plaster surface; there is a gradual transition from the temperature of the room to the temperature of the wall, and condensation will not then take place under any conditions likely to arise in a house. Incidentally, distemper lies well on a felt-floated wall: it looks "solid," as a house painter would say—a result that can be otherwise got only by papering before applying distemper. In using the ordinary method of finishing with a steel float in the boxroom and other back quarters, Spinlove was observing a right principle of careful economy.

[NEXT WEEK: II.—THE DRAINS ARE SUSPECTED.]

ARCHITECTURE OF OUR OWN TIMES

DR. ERICH MENDELSOHN began his lecture at the Architectural Association, on Monday of last week, by remarking that he appeared there as the representative of a movement that was not at war with the past, but turned to find a separate path towards modern beauty.

After defining, with examples, wall and front, he went on to say that the difference between them was a two-dimensional one. Extending it to the whole of a building, that was, considering it three-dimensionally, we got the contrast between space and surface. The Frank Lloyd Wright building, built twenty years ago in Buffalo, showed a clear separation between masses. It caught the light, and thus gained shadow and depth. In a word, it created space. It made no difference whether this organic synthesis were achieved harmonically or contrapuntally. You had, in some cases, horizontal series of the same element, or very similar elements; in others, vertical ones.

Modern architecture was not, he considered, merely a matter of fashion, a further development of mere form. Its creative impulse was born with the appearance of the new building materials—iron, steel and reinforced concrete.

Next, the lecturer defined the principles of construction of the Greeks—support and load, column and architrave; and of the Middle Ages—pillar and vault, weight and shear being transmitted to the walls, though the main load was here supported by buttresses, the walls being practically eliminated as supporters through being pierced with enormous windows. In both principles only compressive forces were dealt with, whereas the principle of our time was tension. And there was no connection between any of them. The first steel girder meant, for us, nothing less than the same feeling of release as that with which the Middle Ages greeted the first vault as a triumph over the Classic principle of construction.

After the interpolation of some remarks on the meaning of the phrase, "utilitarian building," the lecturer proceeded to claim that the introduction into architecture of the idea of standard parts, essential to modern machine construction, rejected the wild, formless growth of former unorganized ages, and organized the technique to arrive once more at primary architectural forms. Skeleton construction replaced solid walls. Works in steel and reinforced concrete replaced the homogeneous mass. The wall that had to support both itself and its load was limited in its openings, both doors and windows. The wall free of load, on the other hand, opened up whole surfaces between the structural supports. With the help of glass they softened the outlines of the architectural masses, making them transparent where formerly they were heavy and solid.

Thus industrial construction was leading the way towards a new style of architecture, and the distinction between utilitarian and non-utilitarian buildings was losing all its meaning. In every building the practical purpose must underlie the plan.

Dynamic architecture and functional architecture were slogans on the Continent chiefly found in art magazines. Dynamic architecture meant individualistic architecture, spiritually, emotionally charged. Functional architecture was collective architecture.

They welcomed every architectural solution which satisfied the real conditions of the problem and provided the unique form it demanded. But they considered it as a lack of character and the sign of a fettered mind to degrade historical forms which, in their own time, had vitality but today were theatrical gestures.

Dr. Mendelsohn concluded by stating his belief that the fire of the new movement had come to warm England and the Scandinavian countries, which, in consequence both of climate and temperament, were essentially moderate.

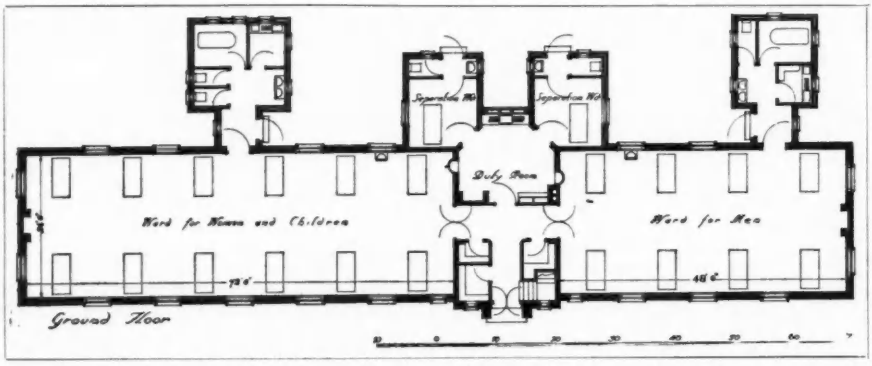
NEW DIPHTHERIA WARD BLOCK

Clatterbridge — DESIGNED BY CAMPBELL AND HONEYBURNE — Cheshire



The entrance front. The external walls are in Buckley rustic bricks, and the roof is covered with silver-grey rustic slates. Except for the large day-room, the accommodation is all on ground-floor level. The back elevation is similar except for the projecting sanitary blocks and separation wards. The unavoidable lack of symmetry between the wings is hardly noticeable.

PLANNING is based on the latest requirements of the Ministry of Health. No cooking is done in this block, but the duty room is equipped with a small range for warming and tea-making purposes. There are windows in this room overlooking each of the large wards, from which every bed can be seen by the nurse on duty, and these can also be used as hatches for the distribution of food. Heating is effected by a low-pressure hot-water system.



Accommodation is provided for twelve women and children and eight men in the two main wards; there are also two single-bed separation wards. Ventilated lobbies lead to the sanitary blocks.



A view of the ward for women and children. The door on the right connects with the bathroom and lavatories. The floor is laid with granwood blocks on concrete (in corridors and lavatories terrazzo has been used), while the walls are finished in Keene's cement, enamelled (in the lavatories, above terrazzo dadoes). The sliding sash windows embody special hospital experience.

NOMINATING THE R.I.B.A. JURY

Readers' Suggestions Analysed

(Letters from several correspondents on this subject appear on page 829)

THE QUESTIONNAIRE

A FORTNIGHT ago we issued to our readers a questionnaire designed to elicit their views as to how a jury, five in number, should be chosen to assess the designs for the new R.I.B.A. building which will be submitted in the forthcoming competition. It will be remembered that the choice of assessors was to be based upon considerations both of policy and of merit.

THE PROBLEM'S DIFFICULTIES

In the first instance it was suggested that each member of the jury should belong to some clearly-defined section or school of opinion. After determining these divisions to his own satisfaction, the reader was invited to name the individual in each group most fitted to represent it. Obviously the choice of the divisions themselves constitutes the more difficult problem of the two.

In the architectural profession few members have unique qualifications, for nearly all of them, either by virtue of their training and experience or of their artistic predilections, can be said to belong to some class or group. For instance, if it be proposed that one of the assessors should represent the Classic tradition, at least a dozen names, eminent in the profession, immediately suggest themselves to us; and a competitor who intended to submit a design in the Classic style would probably be fairly well satisfied with any one of these assessors. And the same applies to other schools of thought. Thus it is easy to suggest distinguished names for the jury. But to determine the main divisions which its members should represent is a matter of great difficulty.

AN OBJECT OF FIERCE SCRUTINY

For the new home for the R.I.B.A. will be subject to a fiercer scrutiny than any building hitherto erected in this country has had to undergo, and there will be an unholy row if it is not acceptable to certain powerful sections of opinion. Or, at least, if it does not please them, the R.I.B.A. must be in a position to point out that at any rate they were represented on the jury.

The groups to be invited to send delegates to the jury are those who will shout the loudest if they are excluded. It seems impossible for the R.I.B.A. Committee, entrusted with the task of appointing the assessors, to escape from this brutally realistic condition.

Let us then turn to the answers to our questionnaire and consider what are the divisions in the profession which, in the opinion of our readers, are most worthy to be represented on the jury.

OUR READERS' VIEWS

The response to the questionnaire was highly gratifying, and a number of interesting recommendations were put forward. Unfortunately a certain number of architects misunderstood the nature of our inquiry, and submitted names without suggesting what section of opinion they represented, and these answers we are naturally obliged to ignore. Again, some of the divisions suggested are much more helpful than others.

CLASSIFICATION BY FACULTIES

We had not contemplated that anything so debatable as a classification by faculties would be attempted. Yet one of our correspondents proposed the names of five jurors, the first of whom represented Taste; the second, Vision; the third, Imagination; the fourth, Efficiency; and the fifth, Youthful Outlook.

This is to open up endless controversy. For these qualities, at least the first four, are ill-defined; they overlap and, moreover, we like to suppose that they are united in the mind of every good architect. Sir Giles Gilbert Scott, who is credited by our correspondent with the quality of Vision, would not feel it a compliment were he expected to seek advice from Sir Edwin Lutyens in all questions of Taste, from Mr. Thomas S. Tait on the occasion when the quality of Imagination was especially called for, and from Mr. Robert Atkinson when Efficiency appeared to be demanded.

THE POLITICAL ASPECTS

This classification takes no account of the political aspects of the case, which are very important. Architects who claim to possess taste certainly have votes, but they have no sense of solidarity, for what may appear good taste to one architect, to another may represent vulgarity *in excelsis*.

The suggestion, however, that Sir Herbert Baker should represent the Imperial or "Colonial" point of view, is of a far more realistic kind, for obviously, as the R.I.B.A. claims to have at heart the interests of architects all over the Empire, it would be a suitable recognition of this fact if one member of the jury were especially qualified to speak in the name of "England beyond the seas." Quite a number of our readers have signified that they attach great importance to this aspect of the question. This is a matter of politics which has doubtless already engaged the attention of the R.I.B.A. Competition Committee.

THE "MODERNISTS"—

As might have been expected, many of the answers to the questionnaire expressed a desire that the "modernist" view shall be adequately represented. There was, however, more conflict of opinion as to whether "modernity" was not also represented by a number of young men who are content to design in the traditional manner. There is no doubt that the majority of our correspondents favoured the inclusion of one or more assessors who should definitely represent the younger generation. The name of Mr. Berry Webber seems a highly popular one in this connection, and this shows that his competition successes and great gifts as a planner have impressed themselves on the imagination of architectural students.

—AND THE RISING GENERATION

It must be borne in mind that of the rising generation there are still very many who are hostile to the "modernist" movement, and they are not likely to allow the protagonists of the latter to enjoy a monopolistic claim to represent "youth." There is no question, however, that the "modernists" have succeeded in making a great stir in the architectural world, and it would not be politic to refuse them adequate representation on the jury of assessors. Among the "modernists" mentioned were T. S. Tait, Robert Atkinson, Howard Robertson, Joseph Emberton and Charles Holden. These recommendations for a definitely "modernist" assessor occurred in forty per cent. of the nomination forms.

FOREIGN ASSESSORS

Two correspondents were of opinion that *all* the assessors should be foreigners. Such views are certainly interesting, for they provide evidence of the enormous respect for Continental architecture which has been fostered by the exponents of "modernism." The names of two eminent Swedish masters are cited. Ragnar Ostberg was expected to provide "a modernist interpretation of the Renaissance"; Ivar Tengbom, "an appreciation of

traditional form"; the brothers Perret, of Paris, "structure and economics"; Mendelsohn, "brutal modernity, with no fruit or flowers"; while for "planning and efficiency" it would be necessary for us to go to Harvey W. Corbett. In another nomination form it is suggested that Le Corbusier and Bruno Taut should have places on the jury. Of these names, that of Ivar Tengbom is perhaps likely to commend itself to the largest number of English architects, as it is well known that the founders of the modern Swedish movement were respectful students of our own eighteenth-century work and owe to it their chief inspiration.

THE ENGLISH TRADITION

The extremely "Continental" flavour of the "modernist" movement has induced many of our correspondents to stipulate that one at least of the assessors should stand definitely for "the English tradition," which they think can best be expounded by Englishmen themselves. The names of Sir Reginald Blomfield, H. V. Lanchester, Professor C. H. Reilly, Professor Patrick Abercrombie, Professor S. D. Adshead, Sir Edwin Lutyens, and Oliver Hill are mentioned in this connection. Again, the terms "academic" and "scholarly" are employed to designate qualities which some of our correspondents wish to see exemplified in the jury. Arthur Davis, Professor A. E. Richardson, Percy Worthington of Manchester, and J. A. Gotch are included in this category.

Among the "traditionalists," however, there was evinced a desire that a twentieth-century interpretation should be given to the Classic style. Sir John Burnet and Partners were recommended as being in favour of "modernized details" and materials; Robert Atkinson was named by one correspondent because he represented "new ideas founded on sound scholarship in architecture."

COMPETITION EXPERIENCE

The words "competition experience" occur often in the nomination forms; and this is not to be wondered at, for competition architecture is a thing apart, and many years of experience are generally required both as competitor and as assessor before a man can achieve the correct judicial attitude towards a set of competition drawings. Consequently it is not surprising that such highly-trained assessors as H. V. Lanchester, H. V. Ashley, Austen Hall, P. S. Worthington and Vincent Harris are recommended for inclusion on the jury.

We shall discuss, below, the important point as to whether some of these distinguished architects would prefer to compete themselves; for the present we are concerned to record the opinion of some of our readers that ideal assessors are not born but made, and made by experience.

EFFICIENCY, PLANNING AND DESIGN

As the ability to plan and to equip a modern building "efficiently" must be acquired by any architect who attains eminence in his profession, it seems scarcely necessary to insist that one or more of the assessors shall possess it. One correspondent suggests the name of Sir Frank Baines as representing "Commerce and Common Sense," but this is a little hard on the four other distinguished architects mentioned in the same nomination form, who, by implication, must be lacking in this latter quality!

"Efficiency" also is too inclusive a term to be employed in this connection, for *all* the jurors should represent efficiency. For the same reason, to specify the ability to design as necessary in an assessor seems supererogatory. Moreover, those correspondents who have named one or two architects as especially gifted in design have unconsciously insulted the remaining members of the jury who are credited with some inferior quality. It appears, however, that there is no lack of architects competent to form a jury of assessors. Indeed, the principal difficulty will be to know whom to eliminate from a list representing so much varied talent.

ASSESSORS AND COMPETITORS

It has been pointed out in the correspondence columns of this JOURNAL that if a jury of as many as five assessors were chosen, it is extremely likely that we should be excluding from the list of possible competitors several architects who would perhaps be competent above all others to produce the ideal design for the new R.I.B.A. building. Mr. Charles Holden has communicated to us some highly interesting observations on this point. He suggests a means of overcoming the difficulty by allowing the functions of competitor and assessor to be vested in the same persons. His scheme is an ingenious one.

MR. HOLDEN'S SCHEME

In his opinion one assessor should be appointed, who would select a number of designs reaching the level of merit usually required for a second round in two-stage competitions. The number need not be limited to ten or twelve, which is the usual figure for the final "round" in such contests, but might be allowed to go as high as twenty. Next, he proposes that these finalists should be made to vote for the best design, and the result of this vote should decide the competition. In order to get a proper result from this voting, the finalists would either be forbidden to vote for their own design or be given two votes, one of which might or might not be cast for their own designs. This procedure, Mr. Holden observes, has never, to his knowledge, been tried before. It is certainly new to the competition system, though we are reminded that in another sphere of action on an historic occasion it was tried with conspicuous success.

THE CASE OF THEMISTOCLES

When the Athenians wished to give a prize to the most brilliant of twelve generals who had fought a great and successful battle on behalf of their city, they allowed the generals to decide the matter between themselves. But the method of voting was cunningly arranged. Each had two votes, one for the best general and the other for the second best. Every one of the generals voted for himself in the first place, but it so happened that they agreed unanimously in giving the second place to Themistocles. So Themistocles was awarded the prize. This story, which seems to bear the stamp of truth, suggests that it might be unwise to follow Mr. Holden's plan of allowing each competitor to give *both* his votes to himself.

There is undoubtedly something to be said for this policy of allowing the competitors to judge the designs themselves, for, as Mr. Holden points out, by the time the competitor has finished his design, provided, of course, that the scheme is a good and practical one, he probably knows more about the programme in all its aspects than could any assessor in the time and with the means at his disposal.

THE JUDGMENT OF ARTISTS

Unfortunately, however, the success of such a scheme depends not only upon the skill of the finalists, which may leave little to be desired, but also upon their judicial capacity. Artists are not always very generous to each other, and it sometimes occurs that the merits of a design placed first in a competition are more fairly appraised by a layman or by a competitor who was not in the running at all, than by the accomplished persons whose designs were placed second or third.

LAY OPINION

Moreover, it is undoubtedly the case that the critical faculty is sometimes developed to a high degree in those who do not themselves practise any of the visual arts. In the last resort, however, we must trust that on such an unique occasion the assessors, however appointed, would be prepared to spare themselves no intellectual effort in their attempt to hold the scales evenly, recognizing how much depends upon their honourable judgment.



ENGLISH PRECEDENT No. 117

ENTRANCE DOORWAY, No. 34 HIGH STREET, WARWICK

This entrance doorway is plainly moulded in wood, and shows in the design of the fanlight a decided Dutch feeling.

The house has a stone plinth, bolection moulded, above which it is stuccoed.

The oriel window on the first floor of the adjoining house, with its shaped and glazed sides and wrought-iron brackets, is uncommon.

[C. M. G. ARMSTRONG.]

LETTERS FROM READERS

The R.I.B.A. Building Jury

SIR,—I fully agree with a jury of five. The difficulty is that men capable of assessing ought in this case to be competing; this indicates a select competition, but I think the decision (i.e. an open competition) arrived at is the right one.

H. ALDERMAN DICKINSON

SIR,—In my opinion, the best method of assessing would be to appoint a chairman—probably the President of the R.I.B.A. at the time; in any case, one who has not drawn up the conditions—and a jury of five, selected from those who compete.

H. W. HOBBISS

SIR,—In order that competitors should be in possession of as much data as possible, and bearing in mind that very many of them will not be able to inspect the site, and will not know the workings of the R.I.B.A. headquarters, would it not be possible to issue a report on the working of the present premises and its deficiencies? This could be produced by the various heads of departments. I feel that it might be of real value not only to competitors but to the assessors.

E. MAXWELL FRY

SIR,—I return your R.I.B.A. Jury voting form duly filled in, but not quite in accordance with the printed instructions.

It seems to me that to select five distinct ideas or points of view, and link them up with architects whose work exclusively exemplifies each of these preconceptions, rather suggests a jury of delegates, who would certainly, as such, prove blind and deaf to every other aspect of design.

In my view, the profession will only have confidence in a jury composed of men who *all* possess the essential qualifications of judgment, knowledge, and achievement.

Thus only shall we be saved from the inspired young competitor who would house the Institute—or any other learned society—in a building resembling a corset factory, and whose conception of a Council Chamber would reflect the dignity and ease of a hospital operating theatre.

F. CHATTERTON

Modernism and the Man in the Street

My view of "modern stuff" is that, naturally, it all depends on what is meant by this, but I believe that the layman is more sympathetic to it than some of us may like to imagine. Clients or would-be clients, if their architects know how to gain their respect, would allow a good deal of scope for design of modernistic character. I believe that most of the so-called "traditional" work that clutters our streets is there because our architects are unable to do more or imagine more. The task is to design exactly to modern requirements, without any of the dead fruit of the past, such as orders and antefixæ, but with also a certain amount of traditional feeling.

V. O. REES

Fittings to Architects' own Designs

SIR,—The case described by Astragal implies professional infallibility and commercial ineptitude with such brevity that one is forced to assume that: (*a*) The architect did properly inquire of the most competent and actual manufacturers in England before making a special agreement with a foreign manufacturer; (*b*) his design would have been a commercial proposition for mass production or general distribution in England; (*c*) he did not believe it would become commonplace, in England or France, or is indifferent to that possibility; and (*d*) he consulted his client in this matter of reproduction or considered himself under no obligation to regard him as the commissioner and owner of the original design.

The unusual electric fittings were too expensive for special production in England *or France*, but a French manufacturer offered to supply them at a special price, subject to the design becoming his property. We may infer from this evidence that commercial enterprise is a French prerogative, and that unselfishness may be inspired by flattery.

I will answer Astragal's question as a designer who owes much to manufacturers in this country and abroad. It is my experience that many people are unable to discriminate between actual manufacturers of fittings and the more numerous firms who merely sell what they are pretending to manufacture. A colleague has told me he would never deal with a certain manufacturer, but preferred to deal with others, to whom he was unconsciously paying an extra profit on what was being made by the manufacturer he objected to. To plagiarize an old story, one must first catch the manufacturer.

The three great competitive electrical manufacturers of the world are the G.E.C. of England, the G.E.C. of the U.S.A., and the A.E.G. of Germany. These organizations are unrivalled, and it is practically impossible to assert any distinction between them as to their respective efficiency. I know of no such organization in France to which I would entrust a serious contract in which time and delivery happened to be the essence of my clients' interests.

A great electrical manufacturing organization in this country has produced work to my designs, costing some thousands of pounds, at a price below the actual cost of production, as a speculative experiment. No industry can be summed up by individual experience, and the electrical industry in particular is ever dependent on other industries, particularly that of glass manufacture. It is well to remember that English manufacturers of electrical fittings and lighting installations are at a disadvantage with their foreign competitors; architects and designers share that disadvantage when glass manufacturers of Germany, France and Czechoslovakia lead in research and production.

In spite of this impediment, there is no more efficient or reasonable contributor to the interests of architecture in England than the General Electric Company, of which I am obliged to disclose myself as a consultant architect-decorator, and, at the same time, without prejudice.

OLIVER P. BERNARD

A Plea for Wood Carvers

SIR,—All your readers will be sorry that the fact that wood-carving is unfashionable has led to unemployment amongst wood carvers. There certainly is a tendency to omit carved ornaments from buildings and furniture, but I believe it is due to causes which make the position more hopeful for the craft as a whole than would be the case if it were due only to industrial conditions and change of fashion (using the latter term to express the something which makes blue the fashionable colour one year and pink the fashionable colour the next year).

Architects and designers are refusing the "usual way of doing it," and the ovolo does not receive its egg and tongue by right of custom. There is some reaction against the unintelligent use of unintelligent carving to camouflage weak architectural design, and against carving or other practices as habits rather than positive acts of design. One hopes that when the purge is complete, architects and designers will give thought to the right and adequate use of carving in architecture and furniture; but it is not easy and will take time.

Carving is an essential part of complete expression in architecture, but, unfortunately, architectural theory and practice is a little uncertain—the profession is not quite sure whether its inspiration should be derived from a

Meccano set or the Baths of Imperial Rome. Until this point is decided, carving cannot be regarded as a safe way of earning a living because there can be no generally accepted or acceptable way of doing it.

JOSEPH ARMITAGE

SIR,—With reference to the appeal on behalf of wood carvers, signed by Messrs. H. E. Taylor and B. Rockman, which appeared in the last issue of THE ARCHITECTS' JOURNAL, I venture to put forward two points, the consideration of which might result in the amelioration of the present distress among wood carvers.

First, no substitute for carving should be other than valueless in years to come. The reproductive method whereby enrichments are made in plastic materials and pulled out of moulds presents a cheaper bill but ever-increasing regrets. The value is not there; the proper degree of skill is not there; the correct material is not there; for no plastic material can take the place of wood.

Secondly, I have heard expression given to a curious belief that, in these days of rush, carving is too slow a process. It is a creed dear to some in authority that the carver is a dilatory and an unpunctual man. "The artist," say they, "is never to be relied upon." I beg leave to contradict this emphatically. A man's word is as his character, not as his occupation. The carver is as diligent, punctual and reliable a member of society as any other. And I beg that when time is being discussed it should be taken for granted that the carver will run with the team. I have never known him do otherwise.

F. P. MORTON, PRESIDENT, THE MASTER CARVERS' ASSOCIATION.

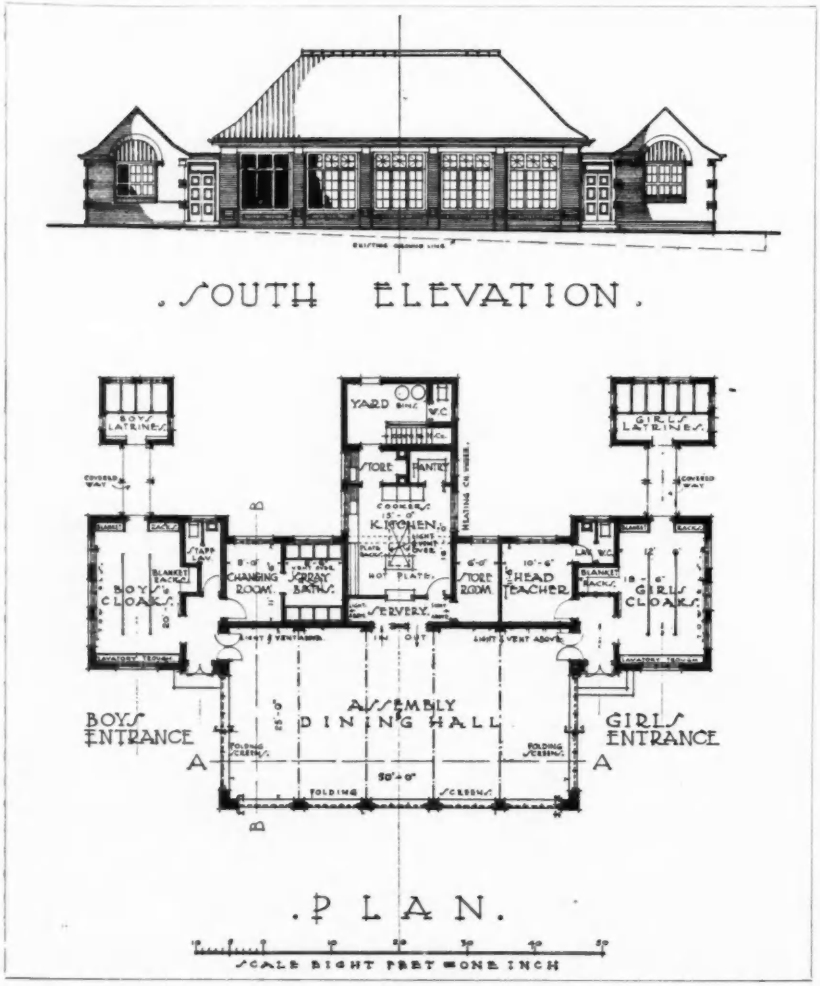
SIR,—The letter in last week's JOURNAL under the above heading draws attention to the painful lack of support the art of the wood carver has received for many years past.

One can trace the decline to the war years, when the craft fell naturally behind, and for some unknown reason has never regained its former position in the decorative arts, while, on the other hand, stone carving has been for many years in a particularly flourishing condition. It may not be understood by the general public that wood carving and stone carving are two distinct crafts, and unemployment in one is not compensated by prosperity in the other.

Wood carving is one of the crafts that England has been justly proud of in the past, and it would be a tragedy if, for want of a little sympathetic support by architects and others, such a great craft with such great traditions were allowed to fall into decay. It only requires to be realized by those with the power to influence work how great is the need for some revival, however slight, in this fine traditional craft.

All these decorative arts depend very largely upon the support and encouragement of the architect, and it is seriously hoped that the appeal in your last issue, signed by the respective secretaries representing employers and operatives, will bring about some amelioration of the wood carvers' condition today.

W. AUMONIER,
VICE-PRESIDENT, MASTER CARVERS' ASSOCIATION OF LONDON.



Limited Competition for an open-air school at West Hartlepool, to accommodate 150, promoted by the local Education Committee: elevation and plan of the winning design. The assessor, F. Willey, made his award as follows: first, J. W. English; second, Hays and Gray; third, J. H. Garry—all of West Hartlepool. The purpose of this school is medical rather than educational. Dining, staff, bath and cloakrooms were required to be included.

Registration: A Parallel

SIR,—We have so often been told that the Institute of Chartered Accountants wishes to obtain registration, that the following report of remarks by Sir William Plender, Bt., the President, at the recent annual meeting, may be of interest to your readers:

"Passing on to speak of the registration of accountants, he stated that the status of the chartered accountant had greatly improved in recent years, and was more and more generally, if not universally, recognized as being the hall-mark of efficiency and high standing. Registration, as interpreted by those bodies which sought it, was an effort to reach a measure of equality between all practising accountants, irrespective of their training, qualifications, and experience. If registration had to come, he asked that chartered accountants should not be included. Their Royal Charter was their register. They needed none else." OBSERVER

A COUNTRY HOUSE IN HERTS.

DESIGNED BY ALEC SMITHERS



The entrance front of Morleys, Great Hallingbury, near Bishop's Stortford. The house was built by Mr. Alec Smithers, the architect, for his own occupation, with original 2¼-in. eighteenth-century bricks. The roof is covered with old tiles fixed with peg nails.

MANY architects have erected houses for their own occupation, but few, alas! have been able to avail themselves of the opportunity to build their walls of 2¼-in. eighteenth-century bricks. Such a rare opportunity, however, came to Mr. Smithers through the demolition of an old mansion in the neighbourhood.

In re-using the bricks he adopted the unusual practice of building his walls 18 ins. thick, with three courses of stretcher bond used alternately with one course of headers. The voids between the stretcher courses above and below the headers were filled with cement and broken brick and gravel concrete, with a wire reinforcement at every 12 ins.

Fortunately, the demolished mansion offered old roofing tiles in addition to bricks, and these also have been re-used, fixed with peg nails on boarding, felting and battening. Many of the old tiles found to be broken were built on edge to form bands on the exterior, window heads and fire-places.

Internally, all the floors are of oak in narrow widths, except the kitchen, pantry, etc., which are of cork tiles. Panel heating is provided throughout. In the principal rooms the panels are finished with a small plaster enrichment by W. Aumonier, who also carved the lime-wood pent and brackets over the drawing-room door to the garden, and the fireplace mantels in the drawing- and dining-rooms.

The fireplace in the drawing-room has a small pattern of rockflower motive, and that in the dining-room a conventional, very small-scale scheme of typical fruits and vegetables. The other fireplaces are of brick with movable fire baskets and oak shelves over.

Water is supplied by main from Harlow, and electric lighting is provided by a small plant installed in some sheds in the walled garden, which have been adapted as garage, engine-house, etc.

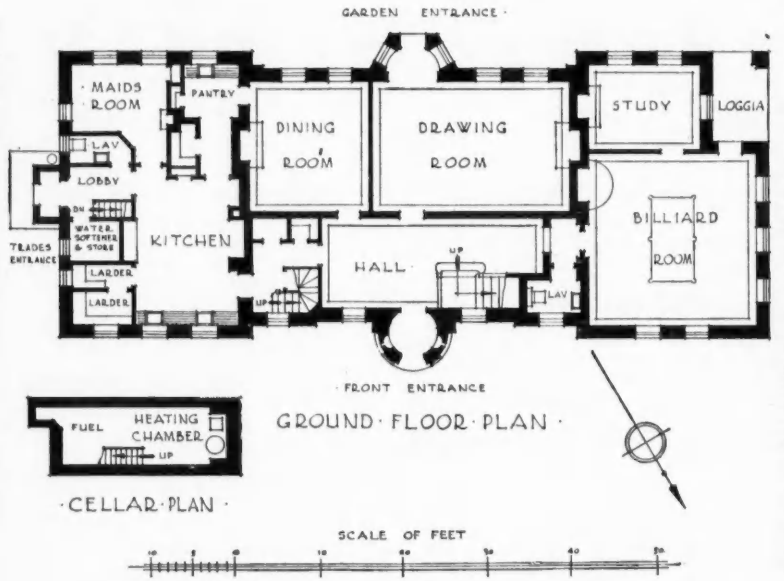


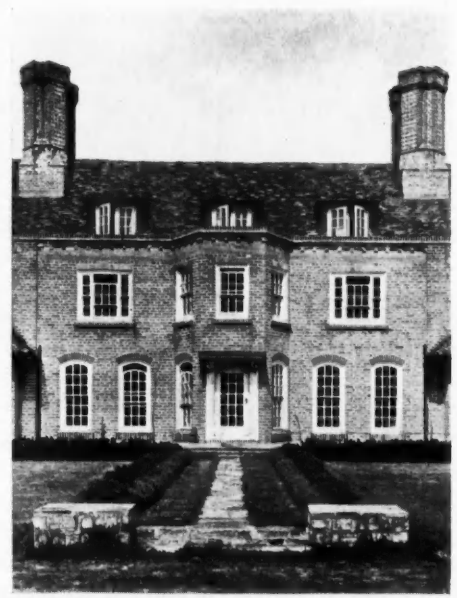
The garden side, on which the principal apartments are planned, faces nearly due south and provides extensive views to the south-west over the surrounding country. The walls are built in three courses of stretcher bond, alternating with one course of headers, and have joints 1 in. wide in white cement.



A view of the garden side showing the delectable surroundings in which the house is placed. The eighteenth-century bricks and tiles used in the exterior were obtained from an old mansion in the neighbourhood, which had to be demolished.



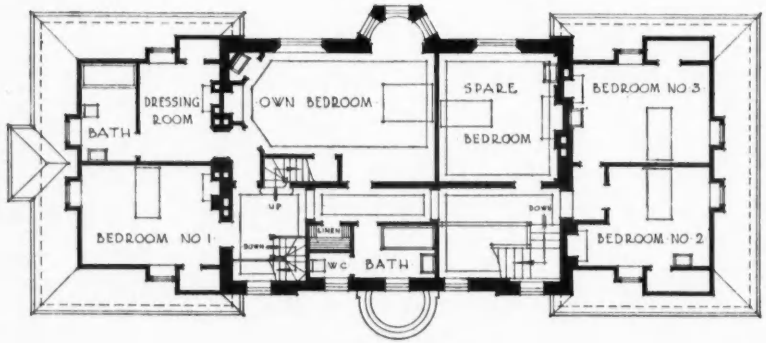




The front entrance, ground-floor and cellar plan, and garden entrance. Many of the tiles obtained from the old demolished mansion were found to be broken. These were used, built on edge, in the elevations, to form bands and window heads.

The front entrance, ground-floor and cellar plan, and garden entrance. Many of the tiles obtained from the old demolished mansion were found to be broken. These were used, built on edge, in the elevations, to form bands and window heads.



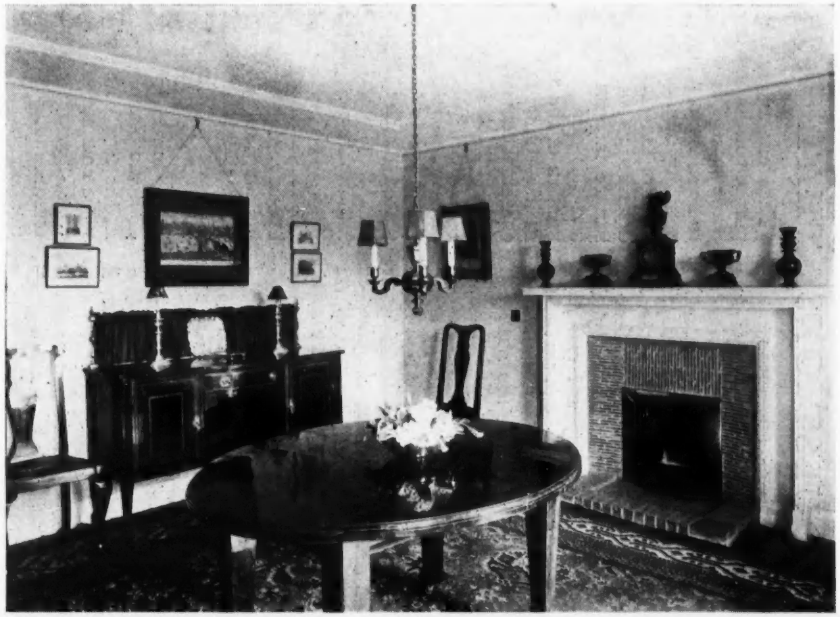


·FIRST·FLOOR·PLAN·



The entrance hall, first-floor plan, and first-floor landing. The interior walls are left in the natural plaster and distempered in cream, French grey or biscuit colour, according to the room.





House at Great Hallingbury, Herts.] [*By Alec Smithers.*

The drawing-room, and the dining-room. Heating is provided from panels arranged round the sides of the rooms at ceiling level and finished in the principal rooms with a small plaster enrichment.

QUESTIONS THAT ARISE

SETTING BACK OF HOUSES

"Subscriber" writes: "*Plans have been submitted to —— Council showing two houses proposed to be erected in the position shown on the accompanying block plan. The planning of the houses shows the principal aspect or architectural front to be the one away from the street and facing the river. The scullery and coal place extensions are between the main wall of the houses and the street giving access to the proposed houses. One bye-law states that 'from the rearmost wall of the building to the boundary of any lands or premises immediately in the rear of the site of the building' a distance of not less than 15 ft. must be provided. It is contended by the architect who has submitted the plans on behalf of the owner that the rear of the building is not the side fronting the street, but that side farther away from it, and therefore the 15 ft. distance mentioned above applies to the space between the houses and the river.*

"*It is also suggested by the architect that there is nothing in the bye-laws to prevent the houses being built close up to the boundary of the 26 ft. street, with the principal aspect either to the street or away from it as he chooses.*

"*The points raised are: (1) Which is the rear of a house for the purposes of the bye-laws? (2) Does the existence of a street or streets affect this question in any way? (3) Assuming the existence of a street does affect the matter, does the first house erected along the line of such street or principal street decide the layout of future houses along that street or principal street? In other words, does it mean that all houses erected thereafter will be considered as having the rear of the houses facing the street or principal street, whatever the architectural layout may be?*"

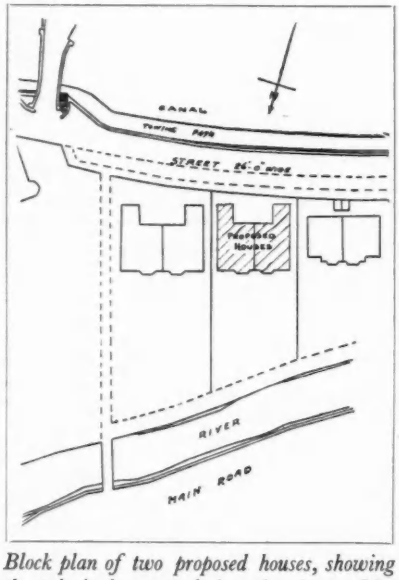
In the Local Authorities' housing schemes the houses or blocks are always arranged in "open development" and nearly always at least 20 ft. distant from the road and, of course, at an even greater distance from the back fence of the garden.

It seems to me that the real purpose of the bye-law quoted by "Subscriber" is to secure that houses shall not be at a less distance than 30 ft. from back to back, for such a regulation would provide for a certain minimum of light and ventilation for the rooms at the back of the houses, that is to say, having external walls furthest from the street. But there seems no reason whatsoever to insist that there should be a 15-ft. distance between what is usually described as the front of the house and the street itself, for it may be assumed that the whole street or road is itself an open space and should normally suffice to light and ventilate the front rooms of the house.

Thus one might argue that for the purpose of the bye-law the front of the house should be what actually appears to be its front, namely, the wall surface abutting upon the road, and that the back of the house is what is normally described as the back, namely, the wall surface farthest away from the road, and this quite irrespective of the disposition of the rooms within the house itself. Otherwise there would be a continual confusion of terms, and architects and local authorities could argue *ad infinitum* as to whether the presence of a water-closet, for instance, or the sink belonging to a scullery or kitchen, placed on the front wall of a house, altered its character and changed it into a back wall within the meaning of the bye-law.

In fact, such an interpretation of the bye-law might render illegal any house built up to the pavement line of a street if a cloakroom or lavatory or any part of a kitchen were lit from the front of the house. This would be a very burdensome restriction upon domestic planning in urban areas, for in the first place it is becoming ever more common to place lavatories and water-closets immediately adjacent to the entrance hall or vestibule, and secondly the increasing noisiness of public thoroughfares on account of motor traffic will render it highly desirable to place the living-rooms at the back.

In the case of such houses it seems more logical to say that their living-rooms face the back than that their backs face the road. For what determines the front of a house is primarily the principal entrance thereto; and also, if we are to take some account of the architectural aspect of the matter, it should be assumed that as soon as these secondary apartments, which have usually been relegated to the back of the house, have been moved to the front, an effort will be made to give them an appearance which is seemly and decorous and worthy of their position at the front of the house facing the public thoroughfare.



Block plan of two proposed houses, showing the principal aspect facing the river. [*See* reply to "Subscriber."]

The answer to Question 3 involves a question of law rather than of terminology. I can see no passage in the bye-laws of the —— Council which throws light upon the problem. I believe, however, that in certain districts local authorities have passed bye-laws to the effect that once a building has been erected of which the front is at some specified distance from the road, the building line of future houses to be erected on either side of it is thereby determined, quite irrespective of whether such houses are planned with their living-rooms facing towards the road or in the other direction.

A. T. E.

BLACK ROOFING SLATES

With reference to the inquiry, published in our issue for May 7, asking where it is possible to obtain black roofing slates, Messrs. Setchell and Sons, Ltd., have sent us the following reply: "So far as we are aware, no black slates are obtainable in the United Kingdom. But we understand they are supplied by the Vendor Slate Co., Inc., Easton, Pennsylvania, U.S.A."

CONSTRUCTION OF DEW PONDS

In our issue for May 14, "L. H. C." wrote: "*Can you give me any information respecting the construction of dew ponds, giving, especially, particulars of position, size and materials used?*"

Messrs. George Hubbard and Son now write:—

The secret of a successful dew pond lies in placing a non-conductor of heat between the pond and the ground. After hollowing out the ground to the area required—the larger the better—place a non-conductor of straw, mica, cork, etc., on the top of which the impervious material for the pond should be laid (prehistoric man is thought to have used puddled clay). The pond need not be more than 6 ins. deep, and should be placed in a high position away from trees, where the winds have every opportunity of blowing across it uninterruptedly. The dew, when deposited, should be drawn off into a tank so as to prevent evaporation.

For further details of the construction of various experimental dew ponds we should like to draw attention to *Neolithic Dewponds and Cattleways*, by A. J. and George Hubbard, published by Longmans Green & Co.

THE SPECIFICATION WRITER

SPECIFICATION writing is usually regarded as the most strictly utilitarian of all the architect's many functions. Very literally, he who sits down to write a specification is concerned with material facts. Accordingly, it is to be the aim of the department now inaugurated to bring to his notice relevant facts of all kinds.

American Practice

AN important contribution to the art of specification writing has recently been made in America by the publication in book form of the actual document used in the erection of a large hospital erected at West Chester, Pennsylvania, from the designs of York and Sawyer. The specification is too often the Cinderella of an architect's office; great care and thought are expended on the preparation of the working drawings, but these are accompanied by a strange, incoherent document, a

> drawler of old saws
> Distilled from some worm-cankered homily,

a despair to the quantity surveyor, and a source of irritation to the contractor, who constantly has to "look up bills of quantities" to understand what is intended.

Just as the publication of the working drawings of well-known architects has done much to raise the general standard of draughtsmanship, so the hope is expressed that the printing of an actual specification will improve the level of specification writing. It is even suggested by the author of this book, which is published in the Pencil Points Library of Specifications, that the architect might also aim at a literary style in this important part of his professional duties. He enumerates the three principal requirements of a specification as (1) It must give such an adequate description of a given work as will enable a builder to understand exactly what is intended; (2)—in terms so definite as will, when made part of a contract, arm the owner with power legally to compel the contractor to produce precisely what was proposed; (3) "Being the emanation of a member of one of the learned professions, it must be couched in good English, both diction and grammar so well observed that no word is wasted, nothing omitted and no ambiguities existent."

In this country at present we are far from the attainment of such an ideal; nevertheless, the compliment implied in the last clause may fire some architects to clarify their style, if it does not inspire all to write in the rounded periods of Gibbon.

When the specimen specification in the book is examined, it is consoling to find throughout the 360 odd pages a cousinly resemblance to the diction of an English relative, with just those differences of expression and practice that provide valuable comparisons. One is struck by the number of sub-contracts into which the work is divided, and the fact that these are all dealt with by the architect and not left to the general contractor to sub-let.

In the first half of the book, comprising the building trades, the specification is printed on the right-hand page only, while the left remains blank except for an occasional editorial comment. These notes, intended primarily for the guidance of the supervisor (who is the American "opposite number" of the British clerk of works), are full of practical common sense, though some of the procedure advised is unfamiliar. One note suggests that before obtaining tenders from firms of specialists, one of the proposed firms be called in and asked to go through the draft and advise on the wording of the various clauses. In theory this may assist the writer, who obviously cannot pretend to encyclopædic knowledge, but it is open to the objection that it may give one firm an undue advantage over others competing.

The well-known expressions "first-class job" and "in the best manner" hardly appear in this specification, and the note suggests that they should be used with the greatest restraint. Too often in this country they appear as a kind of ballad refrain at the end of every clause.

Another suggestion which is unusual in English practice is that "a stiff-necked prompt rejection policy for all inferior work is not always the best for the owner." Rather than delay the job it may be better to accept second-rate articles at a discount to be determined by the architect later, but for a clerk of works to exercise his judgment in this way he must have the architect's confidence to an exceptional degree.

No such latitude can be given to the plasterer. Defective plastering cannot be accepted in any place. If it is bad it cannot be made good, and simply has to be done over again.

Plasterwork on concrete is to have a patent binder mixed with the scratch coat. The method of painting the shuttering with a patent preparation which preserves the surface cement from the aggregate, in order to expose a key for the plaster, is not used. On the contrary, the concrete is to be pecked over to secure a key, as is the common English practice.

Under "painter" there is a careful note on the painting of new plaster, which suggests that the wall shall first be given a preparatory treatment of a solution of 3 lbs. zinc sulphate to a gallon of water, which shall be allowed to dry before the paint is applied.

A very thorough method of ensuring the floors of the balconies being watertight specifies that the concrete surface shall first be painted with tar, then covered with five thicknesses of roofing felt, and finished with a layer of pitch. Upon this the floor tiles are laid either in cement or in an asphalt compound. Expansion joints are to be left at margins.

Cement expansion is specially guarded against throughout the specification. In the external stucco work the second coat (it is three-coat work) is to have horizontal expansion joints cut in it at intervals. And when we come to terrazzo flooring various methods are suggested in the running commentary to prevent cracking. The best of these is to lay $\frac{1}{4}$ in. sand, covered with tar paper, on the concrete and pour on this 2 ins. of 1 to 4 mortar and on this bed to deposit the $\frac{3}{4}$ in. terrazzo in the usual manner. The writer of the specification relies on brass metal strips placed between the field and the border and at intervals in the field, thus dividing up the floors into a number of rectangles each measuring roughly 24 sq. ft., the assumption being that terrazzo on concrete and steel *will* crack and that it is best to let the cracks occur where they are least noticeable and where they will be least conspicuous when filled.

The work in heating, ventilating and lighting is specified in far greater detail than is usual in this country, and that ambiguous clause "to include everything necessary to render the work satisfactory in all respects" does not appear. On the other hand, less latitude is given to the engineering firms to include their own special fitments, but this is probably offset by the higher standardization of American fittings.

The lifts are specified with the same minute detail as the other mechanical trades, and it is doubtful if this method ensures better results than the English one of selecting one or two reliable firms, submitting to them a general outline of the work required, and trusting to the reputation of the makers to make a satisfactory job.

The special hospital equipment sections, such as sterilizing and refrigerating plant, etc., included in the book, may interest the architect who in this country specializes in hospital work. But he would not write these

in his office, and, although included here, they have been written by the consultant mechanical engineer.

A section from which much useful information may be gained is that on hollow metal work. America makes far greater use of this material than does this country. In the Pennsylvania hospital the external plaster angles of the corridors have steel corner heads. Doors to lifts and stairs and certain other offices, which in English practice are often in wood, are all in steel, and the cubicle partitions in the wards are of drawn steel tubing filled in with sheet-steel lower, and glazed upper, panels.

The great drawback to this book is a lack of illustrations. The small-scale plans and the few details are good, but many points, written as they are in somewhat unfamiliar phrases, would be quickly elucidated by detail sketches. Nevertheless, the chief impression left on the mind is the similarity of the methods of specification writing in America and England.

LL. E. W.

Autogenous Lead-burning

OF late years the autogenous welding of lead, more familiarly known as lead-burning, has made rapid strides, especially on public buildings, cathedrals, and old mansions. Prior to 1914, little was known on the domestic side of the plumbing trade about lead-burning. During the war, however, owing to the scarcity of chemical lead-burners, it was necessary to have sanitary and domestic plumbers taught the art, to cope with the demand.

A recent instance where lead-burning has been extensively used is on the new Singer building in City Road, London. Here a massive dome was covered with sheet lead, 16 lb. per foot super. The dome is constructed of steel framework, covered with concrete. The method adopted in covering it with lead was to cut sheets of lead 4 ft. by 2 ft. 6 ins. These were fitted together on the circular and "butt jointed," enclosed by lead rolls, and capped every 4 ft. by heavy cast lead covering pieces 6 ft. by 8 ins. by 1¼ ins. thick, from apex of dome to base. Where the dome merged into the perpendicular sides the lead was in the form of decorative panels, and finished at the base with lead gutters. The whole of the edges of the sheets had to be lead-burned.

The method used in fastening each sheet of lead is this: Each section of lead is cast with clips attached as illustrated in figure one. These clips are then dressed down over the steel frame where an opening has been left for the purpose. A bolt and iron washer is then inserted through the lead and steel frame and screwed down. It will be readily understood that joining the sheets together by soft soldering would have been useless, owing to the uneven expansion and contraction of the metals, when subjected to heat and cold. By lead-burning the joints this difficulty was overcome, as the expansion of the jointing material and the base metal is the same In figure two is seen the

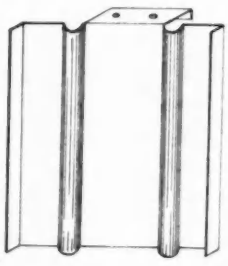


Figure one. A lead sheet forming part of the dome sheathing described on this page. The sheets are joined by means of the oxy-acetylene blowpipe, as shown below

lead-burner in operation on a panel, the blowpipe flame and filling rod (lead) being clearly seen. The joint, when completed, will be flush with the sheets.

Though this special case called for the use of an oxy-acetylene flame, a new system of lead-burning has recently been introduced. This is known

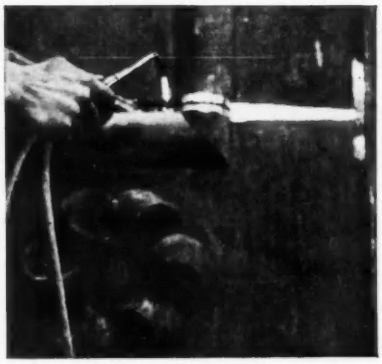


Figure two. Oxy-acetylene lead-welding in progress. By this alternative to soldering, the lead is neither burned nor cockled.

as the "air-acetylene" system, and is one which has proved very satisfactory for any class of work that can be done on the "flat." It is, however, not suitable for upright work, owing to the "sting" of the flame being too large, which causes the heat to spread over too large an area, with fatal results.

In the use of this system, only one gas cylinder is required, namely the fuel gas, which in this instance is acetylene. The temperature attained is approximately 960 deg. Fahr., which is quite suitable when we consider that lead melts at 617 deg. Fahr. This type of burner is capable of penetrating the thickness of lead, should it be ¼ in. thick or equal to 20 lb. per ft. super. The approximate pressure at which these blowpipes work is between 8 and 10 lb. per sq. in., and at these pressures it has been proved that the atmospheric air is induced by the velocity of the acetylene to form a perfect mixture for lead-burning, there being no tarnishing or oxidizing effect on the lead.

Wherever solder has been previously used on roof work, it can be superseded by lead-burning to advantage. Not only does it work out more economically, but it does away with the unequal expansion and contraction that are always experienced when solder is used as the jointing medium between two pieces of lead that are subjected to varied temperatures. E. P.

AS a step towards disseminating the results of practical experience in welding, the Institution of Welding Engineers has devised an interesting competition. Operative welders are offered the opportunity of competing for a prize of ten guineas, and the Institution's gold medal, for the best original paper on "Welding Practices and Methods, based on my own Experiences," which will be read before members some time in the autumn.

EVERY architect will admit that the arrival on the scenes of specialized materials, in ever-increasing variety, has enormously enlarged the possibilities open to him. But that their employment brings with it certain responsibilities is not, perhaps, always clearly recognized. To get the full benefit they offer it is, in many cases, necessary to adapt the traditional methods of building to accommodate them. In general, the old rough-and-ready, rule-of-thumb measurements and calculations are being displaced, all along the line, by the precise methods of science, and success is coming to depend more and more on their adoption.

Should his expectations from a certain material that may be new to his experience not be fully realized, the architect is prone to blame the material. Before doing so, however, he would do well to assure himself that the instructions issued by the manufacturers have, in fact, been faithfully followed. So much is but justice to the maker who may, just conceivably, have an artistic conscience of his own. "It really hurts me," said one of them, "to have people use my product in such a way that it is a disgrace to the material." In these days of publicity no manufacturer can afford lightly to make claims for his product that cannot be substantiated. And he is entitled to fair play for his material.

LITERATURE

NORTH-EAST LANCASHIRE REGIONAL PLANNING REPORT

THE area dealt with in this report, with its bold hills and winding rivers, would be regarded as of more than ordinary beauty but for the facts that a yet more romantic region lies immediately to the north, and that the southern portion, owing to the presence of coal measures, has become industrialized. In the valleys of the Ribble and the Calder are the busy but unbeautiful towns of Blackburn, Darwen, Accrington, Burnley, Nelson, and Colne. These towns grew up from small beginnings during a bad period, Blackburn and Darwen during the middle decades, and the others during the later decades of the nineteenth century. Of late, efforts towards amelioration have been made, but, owing to the stagnation in trade and the population having remained stationary for the last thirty years or so, it has not been practicable to do as much as is regarded as desirable.

It appears from this report that this policy is likely to undergo a change; rather than wait for a possible trade improvement to stimulate development, it would be better to embark on improvement schemes in order to stimulate trade. The statistics show such a rapid increase in road traffic that the construction of new roads and the improvement of old ones naturally take the most prominent place in the programme, though not to the exclusion of other considerations that give point to the value of the report as covering ground rather outside the range of most regional studies. The point which differentiates it arises from the fact that the region is very largely self-dependent for its water supply, and it has therefore been necessary to demarcate the gathering grounds for this in order that they may be protected from possible pollution in the future. While the cities of the plains have had to go far afield for their water, here—owing to the heavy rainfall and the formation of the land—the towns find sufficient water within a few miles, and there is thus a greater risk of pollution if development were to be unrestricted.

Thus, roads and water are the two main features of the programme. While the zoning of urban areas and the study of amenities are dealt with, it is assumed that such questions may be, to a large extent, left to the statutory authorities which will be formed to elaborate and implement the suggestions of the advisory committee. There is little need to explain the allocations made for the purposes of industry, housing and recreation, apart from the very complete and well-arranged regional survey which occupies more than half the book.

One or two points, however, demand special attention. One paragraph deprecates the fact that, as statistics show, many workers are living at places not convenient for their work; but this can often be explained by members of a family having different employments, and also by their changing their workplaces without wishing to disestablish their homes. The references to afforestation are interesting, and also the numerous illustrations of characteristic views and buildings; while the administrative recommendations, with a view to more coordination between the undertakings of the various authorities, seem particularly valuable.

The maps have obviously presented some difficulty; owing to the extent of the area the survey maps in the text are so reduced as only to be readable by the use of a strong magnifying glass, while the supplementary map is on a scale better suited to the lecture-room than the study. Apart from these drawbacks, they illustrate very clearly the points which they are devised to elucidate.

H. V. LANCHESTER

The North-East Lancashire Joint Town-Planning Advisory Committee. Regional Planning Report. Prepared by Reginald Bruce. J. Dickinson, Blackburn. Price 12s. 6d. net.

ART AND SCHOLASTICISM

READERS who remember *Three Reformers* will be attracted to this book of M. Maritain's according to the measure in which they share his strongly Catholic point of view and sympathize with the logic and analytical methods typical of the French mind.

The first of these essays on Art was written some ten years ago, and a translation in a limited edition was printed in this country in 1923, under the title, *The Philosophy of Art*. The present translation has been made from the latest edition, and although M. Maritain has enriched it with additional notes, he has in no way modified his original thesis during the last decade. This certainty is at once his strength and weakness; it allows him to explore the field of æsthetics to the boundaries prescribed by his Church, but beyond these limits his sympathy ceases. Art which breaks out beyond the bounds of authority is a sinister manifestation, and the present chaotic condition of the artistic world a sign not of life but of decay.

M. Maritain looks back to the era of established faith as to a golden age from which there has been a steady declension down to the present day. The decline began when the artisan, ceasing to follow the *via disciplinæ*, became a law to himself and claimed the right to serve his art for art's sake. It is this attitude which makes the more technically perfect Art of the Late Renaissance of less æsthetic value than that of the Primitives, in spite of the clumsy ingenuousness of the latter. "A spiritual virtue can be transmitted by a clumsy shape," and it is this endeavour of the artist to work in co-operation with God which imparts the real power to his work. It is not the subject which matters; Fra Angelico's angels are only part of the story. The great artist is to be judged by the attitude from which he paints, and his capacity of depicting evil without conniving at it. So Dürer will be acquitted where Boucher stands condemned.

M. Maritain has little to say directly upon architecture. He condemns nineteenth-century religious ornament, "belched from the cellars of commercial art," and abominates, with Paul Claudel, the ugliness of such buildings as the Basilica at Lourdes. Modern work, such as that of André Lurçat in Paris or the new church at Limburg,



The Abbot's Lodgings, Whalley Abbey.

From The North-East Lancashire Joint Town-Planning Advisory Committee. Regional Planning Report.

he ignores, and one feels that he is really happiest in the shadow of some great twelfth- or thirteenth-century church such as Our Lady of Chartres, where under the solemn porches he can pace to and fro with a volume of the Angelic Doctor.

LL. E. WILLIAMS

Art and Scholasticism, with Other Essays. By Jacques Maritain. Sheed and Ward. Price 7s. 6d.

Publications Received

The Carnegie United Kingdom Trust (Incorporated by Royal Charter). Sixteenth annual report for the year ending December 31, 1929; approved by the trustees, March 7, 1930. The Secretary, Carnegie United Kingdom Trust, Comely Park House, Dunfermline.

The Scots Mercat "Cross." Second Edition. By William George Black, C.B.E., LL.D., F.S.A. William Hodge & Co., Ltd. Price 2s. 6d. net.

Fire Test with a Fire Resisting Paint. Edited by the Committee of Fire Prevention Department of the National Fire Brigades' Association. Price 2s. 6d. net.

Annual Report, 1929, of the Imperial Institute. By Lt.-General Sir William Furse, K.C.B., D.S.O.

IN PARLIAMENT

[BY OUR PARLIAMENTARY REPRESENTATIVE]

Charing Cross Bridge Bill

FURTHER Parliamentary action on the Charing Cross Bridge Bill, which was recently rejected by a Private Bill Committee, is, apparently, to be expected. Mr. Morrison, the Minister of Transport, in reply to a question by Mr. Sanders, stated that the action now to be taken in relation to the Bill rested with the London County Council. He could only say that, in the event of the Council deciding to ask for a recommittal of the Bill, in order that Parliament might have a further opportunity of expressing its views, the Government, while leaving the matter to a free vote, would advise the House to adopt that course.

Sir B. Eyres-Monsell asked if Mr. Morrison was aware that, however much one might wish for this bridge, to recommend the House of Commons to overthrow one of its Committees was a very grave constitutional precedent? He hoped the Government would take that into consideration.

Mr. Morrison said that had been taken into account, but the fact could not be ignored, particularly by members of the late Government, that what the London County Council had done in connection with the Charing Cross Bridge Bill and the Waterloo Bridge Bill was at the request of the late Government. The present Government had continued the policy of the late Government in that matter. The Government did not feel that they were entitled lightly to throw an arrangement aside in that way without giving the House of Commons an opportunity further to express its opinion.

Sir A. Chamberlain asked what exactly was the motion which the Minister proposed to make in respect of the Charing Cross Bridge Bill. To what Committee did he propose to re-commit it?

Mr. Morrison said that Sir A. Chamberlain was under a misapprehension. There was no intention on the part of the Government to bring forward a motion for re-committal. His answer stated that in the event of the L.C.C. deciding to ask for the re-committal of the Bill, they would make the re-committal motion in order that Parliament might have a further opportunity of expressing its views. The Government, while leaving the matter to a free vote, would advise the House to adopt that course. The question as to what Committee the Bill would be referred to was entirely premature at this stage. No doubt, the L.C.C. would have to be influenced in its considerations as to the chances of success by the attitude of Members of the Opposition, who urged the Council to go into this question when they were a Government, as well as by the attitude of His Majesty's Government.

DO YOU SKETCH?

Though the Sketch Club has already held three sessions, and in next week's issue will hold its fourth, only the first of these has been devoted to the doings of the private member. It augurs well for the Club's future that this single event should have brought in so many letters of appreciation, and, what is more to the point, such a wealth of material from members eager to be "hung." Upon this the hanging committee are now busy, and their duties, already onerous, will, they hope (and yet dread) be redoubled in response to the announcement, to be made next week, of a novel competition open to sketchers of all persuasions.

Sir A. Chamberlain said he was concerned with the constitutional practice of the House of Commons, and the responsibility they had to their committees. Might he take it that the Government had undertaken to support the motion, if made, and that the Bill would be re-committed to a Committee which could hear evidence, as the previous Committee did?

Mr. Morrison replied that, clearly, that would have to be the case.

Preservation of London Squares

At question time Mr. Greenwood said he had hoped to introduce a Bill for the preservation of London Squares this Session, but in view of the pressure of other business he feared it might not now be possible to do so.

Exchequer Subsidy Value

In reply to Mr. Freeman, who asked the capital value of the Exchequer subsidy under the Wheatley and Chamberlain Acts, and under the Bill now before the House, Mr. Greenwood gave the following figures: £4 for twenty years under the 1923 Act, £50; £7 10s. for forty years under the 1924 Act, £129; £2 5s. per person for forty years proposed under the present Bill on the basis of five persons to a house on average, £193

Houses of Parliament Stonework

Mr. Lansbury, First Commissioner of Works, stated that the expenditure on repairing the stonework of the Houses of Parliament up to March 31 last amounted to £61,475, of which £26,896 was expended during the financial year ended on that date. The estimated expenditure for the present financial year was £31,200.

Domestic Heating

Mr. Simon asked the Secretary for Mines whether the Fuel Research Board had been successful in finding more efficient or more smokeless methods than those now in force in heating working-class houses; and, if so, whether a report would be published, giving practical recommendations that would be of use to local authorities and builders.

Mr. Ben Turner said that the Department of Scientific and Industrial Research, through its Fuel Research and Building Research organisations had conducted a large amount of research on the problems involved in the improvement of methods of domestic heating, and a number of reports had been published. As regarded eliminating the production of smoke, that was primarily a question of the use of electricity or smokeless fuels. Very extensive investigations had been carried out at the Fuel Research Station into the production of smokeless fuels, especially by improving methods of gas manufacture and the manufacture

of coke suitable for domestic use. The best methods of heating in relation to any particular housing scheme depended so much on local conditions that it was not considered practicable, at present, to prepare a report which would contain practical recommendations suited to every case, but the Director of Fuel Research was always ready, if asked in any particular case, to give all assistance and information he could to local authorities and others connected with such schemes.

The Government's Slum Bill

Standing Committee "A" of the House of Commons last week completed the consideration of Clause 1 of the Housing (No. 2) Bill, and then proceeded to discuss Clause 2, which lays down the procedure to be adopted for securing the clearance of slum areas.

Mr. Womersley moved an amendment to extend the period allowed for the demolition of a building from six weeks to three months. Mr. Greenwood, the Minister of Health, resisted the amendment, but later accepted another amendment, which was agreed to, permitting a period of six weeks " or such longer time as in the circumstances the local authority may deem advisable."

Mr. Greenwood moved to add to the clause a proviso to the effect that no land to which a clearance order applies shall be used for building purposes or otherwise developed, except subject to such restrictions and conditions as the local authority may think fit to impose, any aggrieved owner having the right of appeal to the Minister.

The amendment was agreed to, and the Clause, as amended, was carried. Clauses 3 (Purchase by local authority of land surrounded by or adjoining clearance area) and 4 (Treatment of clearance area) were also agreed to.

SOCIETIES AND INSTITUTIONS

A.A. ELECTION OF OFFICERS

At a recent meeting of the Architectural Association, it was announced that the following had been elected officers and members of the council for the 1930–1931 session :

President, Mr. G. Grey Wornum, F.R.I.B.A.; vice-presidents, Messrs. A. B. Knapp-Fisher, F.R.I.B.A. and C. H. James, F.R.I.B.A.; past president, Mr. F. Winton Newman, F.R.I.B.A.; hon. treasurer, Mr. C. Lovett-Gill, F.R.I.B.A.; hon. secretary, Mr. L. H. Bucknell, A.R.I.B.A.; hon. librarian, Mr. Lionel G. Pearson, F.R.I.B.A.; hon. editor, *Architectural Association Journal*, Mr. G. R. Dawbarn, M.A., A.R.I.B.A.

Ordinary members of the council : Messrs. G. W. Home, A.R.I.B.A., W. M. Keesey, A.R.I.B.A., A. W. Kenyon, F.R.I.B.A., J. R. Leathart, F.R.I.B.A., Edward Maufe, F.R.I.B.A., O. P. Milne, F.R.I.B.A., Hon. H. A. Pakington, A.R.I.B.A., Stanley C. Ramsey, F.R.I.B.A., C. D. St. Leger, M.A., A.R.I.B.A., and E. Berry Webber, A.R.I.B.A.

ULSTER SOCIETY OF ARCHITECTS

The annual general meeting of the above Society was held in the Society's Rooms, Belfast. Mr. E. R. Kennedy (President) occupied the chair. The annual report and statement of accounts were both unanimously adopted.

The following members were elected as officers for the year 1930–1931 :

President, Mr. J. A. Davidson; vice-president, Mr. R. H. Gibson; hon. treasurer, Mr. R. S. Wilshire; hon. secretary, Mr. J. McGeagh; hon. auditors, Messrs. T. Callender and J. Scott. Members of council : Messrs. T. R. Eagar, E. R. Kennedy, G. O'Neill, J. Seeds, and K. Edwards. Associate Members : Messrs. B. Couser and C. McLynn.

R.I.B.A. STATUTORY EXAMINATION

At the recent R.I.B.A. statutory examination for candidates for the office of district surveyor, one candidate, Mr. Gordon Welch, presented himself, and was successful in the examination.

BRITISH ARCHITECTS' CONFERENCE, 1930

The annual conference will take place at Norwich on June 18 to 21, at the invitation of the Norfolk and Norwich Association of Architects. All members and students of the Royal Institute of British Architects and all members of the allied societies and of the Architectural Association are invited to attend.

The headquarters of the conference will be at the Stuart Hall, Norwich.

Programme of the arrangements is as follows : Wednesday, June 18, 8 to 11 p.m. An informal reception will be held in the Stuart Hall.

Thursday, June 19.—10.15 a.m. : The conference will assemble at the Stuart Hall for the inaugural meeting. The members will be officially welcomed by the Lord Mayor of Norwich. The inaugural address will be delivered by the President, to be followed by a paper on " Regional Planning, with special reference to Norwich and Norfolk," by Mr. W. Harding Thompson, F.R.I.B.A. 1 p.m. : Lunch. 2 p.m. : Assemble at St. Andrew's Hall, where the conference photograph will be taken. 2.30 p.m. : Alternative visits : (*a*) Elm Hill, Grammar School Chapel, the Deanery, the Cathedral; (*b*) Strangers' Hall, the Guildhall, St. Peter Mancroft, Bridewell (outside), St. Peter Hungate, Princes Street; (*c*) St. George's Colegate Church, Octagon Chapel, Old Meeting House, St. Helen's, Bishop Bridge; (*d*) Market Place, St. Peter Mancroft, Bethel Street, Lady Lane, High School,



The exhibit of Messrs. W. H. Gaze and Sons, Ltd., awarded the gold medal at the Chelsea Flower Show last week. It was designed by H. G. Freemantle, garden architect, and comprised a formal garden with a circular summerhouse, having two bays open. One bay leads on to a pergola, composed of rough stone columns, and woodwork of ash, and the other looks out on to a pool. At the back of the summer-house was an oak-studded door with an iron grille. On two sides of the garden was an old-fashioned wall with a straw-thatched coping. A lawn and flower border completed the lay-out.

St. Stephens, Surrey Street, All Saints Green, Cattle Market; (*e*) St. John Maddermarket Church, St. Gregory's Church, St. Laurence Church, Strangers' Hall, Bridewell, Princes Street. 8 p.m. to 11 p.m.: At the Castle Museum. Reception by the Lord Mayor of Norwich, Mr. H. Harper Smith, J.P., and the Lady Mayoress.

Friday, June 20.—Alternative whole-day tours. Halts will be made at places as follows: (1) Cawston Church, Salle Church; Aylsham [lunch]; Blickling Hall [tea]; (2) Melton Constable Hall, Binham Priory, Blakeney Church, Blakeney [lunch]; Cley Church, Salthouse, Letheringsett [tea]; (3) tour of the Norfolk Broads by motor-launch. The party will be taken to Wroxham and brought back from Barton by motor-coach. There will be a special regatta on Wroxham Broad and visits to Ranworth and Ludham Churches, Horning [lunch], How Hill [tea]; (4) East Barsham Hall, Raynham Hall, Castle Acre Priory [lunch], Swaffham [tea]. Inclusive cost of visit 12s. 7.15 p.m. for 7.30 p.m.: Conference banquet at St. Andrew's Hall, Norwich.

Saturday, June 21.—Informal visits: 9.15 a.m. to 1 p.m.: (*a*) Great Yarmouth (motor-coach tour), 5s.; (*b*) Wymondham and Hingham (motor-coach tour), 3s. 6d.; (*c*) Norwich Cathedral.

Those intending to be present should notify the Secretary, R.I.B.A., 9 Conduit Street, W.1.

A.A. ANNUAL EXCURSION, 1930

The Architectural Association's annual excursion for 1930 will be to Denmark and Sweden.

The party will leave Tilbury on Wednesday, July 16, for Gothenburg, where two days will be spent (July 18 and 19), proceeding afterwards to Stockholm. Four days will be spent in Stockholm, leaving on the night of July 23 for Copenhagen. The party will leave Copenhagen on the morning of July 28, returning *via* Ejsberg-Harwich, arriving in London on the evening of July 29.

During the visit most of the important buildings, old and new, will be visited under the guidance of Swedish and Danish architects, and ample opportunity will be given for visiting the Exhibition of Industrial Art in Stockholm.

Special arrangements have been made for members of the party to travel either 1st or 3rd class (students) at special rates. The inclusive cost will be as follows: 1st class boat, 2nd class trains: £22; 2nd class boat, 3rd class trains: £14. Names should be submitted to Mr. F. R. Yerbury, secretary, Architectural Association, 34 Bedford Square, W.C.1.

Mr. William Henry Kitching, of Barrow-on-Humber, Lincs, architect, left £15,669 (net personalty £8,231).

LAW REPORT

DILAPIDATION CLAIM—NOVEL POINT

Eborall v. *Parminter and another. Official Referee's Court, High Court of Justice. Before Sir Francis Newbolt*, K.C.

THIS was an action by Mr. Eborall against Mrs. Parminter and Mr. Arendt for damages for alleged breach of a covenant to repair Lyndhurst, Hayne Road, Beckenham.

Sir Francis Newbolt, in giving judgment, said this was a landlord and tenant case. The plaintiff sued as lessor; the defendant Arendt was the lessee, for the lease had expired, and the defendant Mrs. Parminter was his assignee. The first defendant had made the second defendant a third party, claiming an indemnity. The parties had consented that an independent witness should value the dilapidations; this had been done, and the dilapidations were agreed at £345. In his judgment the amount in the action must not exceed the amount, if any, by which the value of the reversion was diminished owing to the breach of covenant. The damages could not therefore exceed £345, and that sum must be reduced by its excess over the diminution of the value of the reversion. Evidence was required of the diminution. The defendant Arendt did not dispute that the value of the reversion was diminished, and paid £200 into Court. The independent witness, Mr. Horser, divided the £345 into two parts, alloting £100 to the external repairs. It was not disputed that this sum was due to the plaintiff. As regards the balance, which represented the decorative repairs, plaintiff contended that if that amount had been so expended it would enhance the reversion or sale value by that amount. The house was actually sold for £2,500, and it was said that if the house had been properly repaired it would have been worth about £3,000. Defendant, however, contended that a new tenant would like to do his own repairs and that the value of the reversion was diminished. Having regard to all the facts of the case, he held that the value of the reversion was diminished by £245, owing to the breach, and he gave judgment for plaintiff for that amount against both defendants with costs. He gave judgment for that amount and for an indemnity for the defendant Arendt against the defendant Parminter with costs, and ordered the money paid into Court to be paid out to the plaintiff in part payment of the damages and costs.

COMPETITIONS OPEN

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs: June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor: J. Ernest Franck, F.R.I.B.A. Premiums: £300, £200, £100 and £50. Particulars, etc., obtainable from A. W.

The premises of Messrs. Mann, George and Co. (S.A.), Ltd., Cape Town. The exterior has been treated with



outside quality Matroil washable water paint, buff colour: a product of Messrs. Lewis Berger and Sons, Ltd.

Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thompson, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor: H. V. Ashley, F.R.I.B.A. Premiums: £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs: July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall, which is to be built on the site of the old town hall at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

July 31.—The Dudley Education Authority invites architects having an office within a radius of fifteen miles of Dudley to submit competitive designs for a Council school to accommodate 320 children, to be erected on the Brewery Fields estate; also a school for 400 children on the Priory estate. Assessor: Herbert T. Buckland, F.R.I.B.A. Premiums: £150, £100, and £50. Applications for conditions of the competition, etc., should have been made to J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley, by April 30. Deposit £1 1s. Latest date for submission of designs: July 31.

September 1.—The Bangor (Co. Down) Borough Council invites architects or town planners to submit designs in competition for laying out the sea front within the Borough. Assessor: Professor Patrick Abercrombie, F.R.I.B.A. Premiums: £150 and £50 for first and second places, respectively. Copies of the conditions and plans will be forwarded on application to J. Milliken, Town Clerk, Borough Council Offices, Bangor, Co. Down. Deposit £1 1s. Latest date for submission of designs: September 1.

No date.—The Carlisle Corporation invites British architects to submit designs for the façade to English Street and the Victoria Viaduct, suitable for shops and business premises. The site was previously occupied by the Prison. The total length of the frontage is approximately 358 ft. Assessor: Francis Jones, F.R.I.B.A. Premiums: £300, £200, and £100. Particulars of the competition, etc., may be obtained from Percy Dalton, A.M.INST.C.E., A.R.I.B.A., City Engineer, 18 Fisher Street, Carlisle. Deposit, £1 1s.

No date.—The General Syndicate, Ltd., invites architects to submit competitive schemes for the development of a site at Liverpool, fronting St. John's Lane, Queen Square and Rose Street. Premiums: £250, £100 and £50, for first, second and third prizes, respectively. Particulars, etc., are obtainable on application to the Secretary, the General Building Syndicate, Ltd., 36 St. Martin's Lane, W.C.2.

THE ARCHITECTS' DIARY

WEDNESDAY, MAY 28

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Exhibition of work of Eric Mendelsohn. Until June 14. 10 a.m. till 6 p.m. (Saturdays 5 p.m.) **10 a.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. "The Father of English Pottery—Josiah Wedgwood, F.R.S., Potter, Inventor and Man of Science." By Harry Barnard. Frank H. Wedgwood will preside. **8 p.m.**

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition open to the public. **10 a.m.**

ROYAL SOCIETY OF ARTS, John Street, Adelphi, W.C.2. Ordinary Meeting. **8 p.m.**

PARSONS' GALLERIES, 315-317 Oxford Street, W.1. Exhibition of Scottish Art. 10 a.m. to 6 p.m. Until May 31. **10 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art, held in the North Court. 10 a.m. to 6 p.m. (Thursdays, 10 a.m. to 10 p.m.) **10 a.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

FRIDAY, MAY 30

R.I.B.A., 9 Conduit Street, W.1. Intermediate Examination. Until June 5.

TOWN PLANNING INSTITUTE. At Caxton Hall, Caxton Street, S.W.1. "Town Planning Economics." By J. Macaulay. **6 p.m.**

SOCIETY FOR THE PROTECTION OF ANCIENT BUILDINGS. At the Institution of Civil Engineers, Great George Street, Westminster, S.W.1. Annual General Meeting. An address will be given by Professor W. R. Lethaby. Tea 4 p.m. **4.30 p.m.**

ROYAL SANITARY INSTITUTE. At Blackburn. Various visits of inspection. Also, discussions to take place in the Public Halls. **7 p.m.**

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. At the Town Hall, Cheltenham. Various visits of inspection, and discussion on paper, submitted by the Borough Engineer, on "Cheltenham Sewage Purification Works." **10 a.m.**

SATURDAY, MAY 31

Sunrise, 4.50 a.m. Sunset, 9.5 p.m.

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Visits to Hampton Court and Richmond, organized by the Croydon and Guildford Chapters. It is proposed to visit Hampton Court. Meet at Main Entrance to Hampton Court at 10.15 a.m. and proceed to Richmond for lunch (5s.) at 1.30 p.m., followed by a tour of the Richmond district. Tea, 4.30 p.m. Members and guests will assemble at the Kingston Town Hall at 5.30 p.m., where a paper will be read on "Kingston-upon-Thames." Whole day cost of visit, 10s. Students, 5s. **10.15 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. In connection with the Bicentenary of Josiah Wedgwood, a special exhibition of Wedgwood ware will be opened in Room 136. **10.15 a.m.**

MONDAY, JUNE 2

INSTITUTION OF ELECTRICAL ENGINEERS. Summer Meeting at the Irish Centre. June 2–6, inclusive. Assemble in the evening at the Gresham Hotel, Dublin.

TUESDAY, JUNE 3

ILLUMINATING ENGINEERING SOCIETY, 32 Victoria Street, S.W.1. Annual Meeting. **7 p.m.**

GARDEN CITIES AND TOWN PLANNING ASSOCIATION, 3 Gray's Inn Place, W.C.1. Whitsun Housing and Town Planning Tour. June 3–14 inclusive. Visit to Northern Capitals of Europe. Full particulars on application to the Secretary of the Association.

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Motor trip in Co. Wicklow, including inspection of overhead transmission lines. Lunch and tea at Glendalough.

WEDNESDAY, JUNE 4

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Proceed by special train to Limerick for visit to the Shannon Scheme.

THURSDAY, JUNE 5

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Visit to the brewery of Messrs. A. Guinness, Sons & Co. Lunch by invitation of the Company. Afternoon: Leave Dublin by special train for Belfast. Evening: Reception by the Lord Mayor of Belfast, Rt. Hon. Sir William Coates, at the City Hall.

SATURDAY, JUNE 7

Sunrise, 4.45 a.m. Sunset, 9.12 p.m.

WHIT MONDAY, JUNE 9

THURSDAY, JUNE 12

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual Conversazione, to be held at the Natural History Museum, South Kensington, S.W.7.

SATURDAY, JUNE 14

Sunrise, 4.43 a.m. Sunset, 9.18 p.m.

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND. Gloucestershire Branch. At the Town Hall, Cheltenham. Conference under the chairmanship of Major-General Sir Fabian Ware, K.C.V.O., K.B.E. 11 a.m. Opening address by the Mayor of Cheltenham, followed by "Regional and Town Planning," by Captain J. H. Trye, C.B.E., R.N. Discussion on the subject to be opened by G. L. Pepler. 12.45 p.m.: Lunch. Afternoon Session, 2 p.m.–4 p.m.: "The Traditional Building of the Cotswold and surrounding Stone Districts." By H. Stratton Davis, F.R.I.B.A.; and "Modern Building and the Use of New Materials," by Thomas Falconer, F.R.I.B.A., followed by discussions to be opened by Sir Philip Stott, Bart., and J. W. Robertson Scott, respectively. **11 a.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Annual General Meeting and Annual Dinner. Particulars will be announced later.

CHELMSFORD PUBLIC LIBRARY COMPETITION. Latest date for submission of designs.

KINGSTON-UPON-THAMES PUBLIC BATHS COMPETITION. Latest date for submission of designs.

MONDAY, JUNE 16

R.I.B.A., 9 Conduit Street, W.1. Election of Council and Standing Committees: Election of Members. **8 p.m.**

WEDNESDAY, JUNE 18

R.I.B.A., 9 Conduit Street, W.1. British Architects' Conference, to be held at Norwich. Until June 21 inclusive.

FRIDAY, JUNE 20

LONDON SOCIETY, Lancaster House, St. James's Street, S.W.1. At the Royal Society of Arts, John Street, Adelphi, W.C.2. Provisional date for a lecture on "Beautification of our Arterial Roads." By Thomas C. Adams.

SATURDAY, JUNE 21

Sunrise, 4.42 a.m. Sunset, 9.21 p.m.

ROYAL SANITARY INSTITUTE. Annual Congress to be held at Margate until June 28 inclusive. Various lectures, discussions and visits will be held throughout the week. **12 noon.**

WEDNESDAY, JUNE 25

ROYAL SANITARY INSTITUTE. At Margate. Meetings of the Architectural and Engineering Sections. **10 a.m.**

FRIDAY, JUNE 27

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL SOCIETY, The Castle, Winchester. Excursion to the Joinery Works of Messrs. W. E. Chivers and Sons, Ltd., Devizes, and buildings of architectural interest in the neighbourhood. A General Meeting will be held after lunch.

SATURDAY, JUNE 28

Sunrise, 4.45 a.m. Sunset, 9.21 p.m.

WEDNESDAY, JULY 2

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION. Annual Exhibition to be held at Portsmouth until July 8.

FRIDAY, JULY 4

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Joint Meeting with the Hampshire and Isle of Wight Architectural Association. Visits to the new Town Hall (description by E. Berry Webber), the Old Bargate (description by H. P. Cart de Lafontaine), Guildhall, Empire Theatre, and Ocean Liners. Particulars are obtainable from the Hon. Secretary.

SATURDAY, JULY 5

Sunrise, 4.49 a.m. Sunset, 9.19 p.m.

WORTHING MUNICIPAL BATHS COMPETITION. Latest date for submission of designs.

SUNDAY, JULY 6

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Excursion to Romsey and the New Forest.

SATURDAY, JULY 12

Sunrise, 4.56 a.m. Sunset, 9.14 p.m.

WEDNESDAY, JULY 16

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Annual Excursion to Denmark and Sweden, returning to London on July 29. Particulars of the tour, etc., are obtainable from F. R. Yerbury, the Secretary, Architectural Association.

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Liége. July 16–17.

FRIDAY, JULY 18

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Anvers. July 18–19.

SATURDAY, JULY 19

Sunrise, 5.48 a.m. Sunset, 9.8 p.m.

SATURDAY, JULY 26

Sunrise, 5.13 a.m. Sunset, 8.59 p.m.

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Visits to Leeds Castle, Chilham or Bodiam, etc., organized by the Canterbury and Tunbridge Wells Chapters. Particulars of the visits are obtainable from the Hon. Secretaries of the Chapters.

THURSDAY, JULY 31

LUTON TOWN HALL COMPETITION. Latest date for submission of designs.

DUDLEY SCHOOL COMPETITION. Latest date for submission of designs.

TRADE NOTES

H.R.H. the Duke of York recently visited the Rugby works of the British Thomson-Houston Co., Ltd., as President of the Industrial Welfare Society. He was accompanied by the Rev. Robert R. Hyde, director of the Society. After being received by Mr. W. C. Lusk (chairman of the British Thomson-Houston Company), Messrs. G. M. Campbell, F. Fraser, and J. L. Wilson, directors, and Mr. A. P. Young, manager, Rugby works, the Duke made a tour of the works, including the Mazda electric lamp works, fabrication department, motor factory, turbine department, power transformer factory, electrical machine shop, the foundry, ambulance station, etc. A feature of the tour was the presentation to His Royal Highness of employees with long service, there being quite a number who have been with the company for over a quarter of a century.

*

In most buildings where food is prepared for human consumption there is sure to be found one at least of the electrical appliances of the Hobart Manufacturing Company, Ltd. : a meat chopper, coffee mill, a simple or combined washer for dishes and glassware, a mixer, or a potato peeler. Perhaps the most striking testimony to the firms' meat chopper is made by Mr. M. Blenkinsop, of the Butcher Market, Newcastle-upon-Tyne. Nineteen years ago he installed the machine, and it has run continuously, year in and year out, without expense. At the beginning it was the only electric machine installed, and for the first few years was also used to cut meat for other butchers. Now there are well over twenty machines in the meat market in that city. The firms' coffee mills have been on the market for thirty-five years, and the various models lend themselves to the widest everyday use. Many advantages are claimed for all these appliances, including the dish and glasswashers, which the firm claim are recommended by 27,000 users, the mixers and the potato peeler. Interesting illustrated booklets dealing with the various specialities can be obtained on application to the Hobart Manufacturing Company, Ltd., Hobart House, Charterhouse Street, London, E.C.1.

*

The use of explosives in oil and water wells, metal breaking, submarine and demolition work, etc., is the subject of a booklet published by the Explosives Sales Department of Imperial Chemical Industries, Ltd. The booklet is the successor to "Metal Breaking with Explosives and other Uncommon Blasting Operations," and the information given is supplementary to that given in the following three booklets published by the department : "Blasting Explosives and Accessories," "Blasting in Collieries and Hints on Electric Shot Firing," "Explosives in Agriculture." A chapter shows how the demolition of brick and concrete work may be greatly facilitated by explosives. By the proper placing and loading of holes, the solid mass can be broken into material of a size which will permit of easy handling.

*

A means to restore wilted vegetables to their original garden freshness is the latest development of electrical refrigeration by Messrs. Frigidaire, Ltd. Flabby celery and shrivelled lettuce become crisp and dewy after five hours of the "treatment," which merely consists of placing the vegetables in a special compartment of an electrical refrigerator. It is called a "Hydrator." It is understood that many years of research went to the perfecting of this special compartment, the difficulty being to isolate the moist cold suitable for vegetables from the dry cold essential for keeping other foods.

*

Among the London firms who are prepared to manufacture household and hotel furniture from architects' designs and specifications are Messrs. C. and R. Light, of 54 Great Eastern Street. In the showrooms of this old-established firm is a big range of walnut and mahogany furniture for bedrooms, dining- and drawing-rooms. Among the firm's specialities of new design is a wardrobe semi-fitted ; one-half fitted for hanging, with pull-out gown hangers and with boot rails, and the other half with two drawers, shelf and sliding coat hanger. The firm are also patentees of several registered types of tables, etc. The firm, however, collaborate with architects in producing furniture to harmonize with the particular style or period in which any apartment is designed.

THE BUILDINGS ILLUSTRATED

Following are the names of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :

Pyrene Factory, Great West Road (pages 814, 818–820). General contractors, Edwards Construction Co., Ltd. Sub-contractors : A. D. Dawnay and Sons, Ltd., constructional steelwork; Henry Hope and Sons, Ltd., steel sashes; British Reinforced Concrete Eng. Co., Ltd., reinforcing steel; Asbestos Cement Building Products, Ltd., roof tiling and asbestos ceiling sheets; Huntley and Sparks, Ltd., slotted inserts; May Construction Co., Ltd., sound damping; J. W. Gray and Sons, Ltd., lightning conductor; H. W. Dutton & Co., Ltd., heating installation; H. and C. Davies, Ltd., Haywards, Ltd., and Dennison Kett & Co., Ltd., iron staircases; Electrical Installations, Ltd., electrical work; Carter & Co., Ltd., faience and wall tiling; Ragusa Asphalte Paving Co., Ltd., asphalt; W. H. Gascoigne & Co., Ltd., plumbing; Crittall Manufacturing Co., Ltd., iron doors; Comyn Ching & Co., Ltd., iron doors and ironmongery; John Tann, Ltd., strong-room door; Wilfley Flooring Co., Ltd., composition flooring; D. Anderson and Sons, Ltd., roofing felt; R. W. Brooke & Co., Ltd., wood-block flooring; Brilliant Sign Co., Ltd., trade mark sign; Tunnel Portland Cement Co., Ltd., Tunnel Portland cement and Tunnelite rapid-hardening cement; E. J. Elgood, Ltd., granolithic paving; Leeds Fireclay Co., Ltd., sanitary fittings; Redalon, Ltd., solution for plaster key and Bulldog clips for floors; Samuel Elliott and Sons, Ltd., special joinery; Mellowes & Co., Ltd., patent glazing; Fredk. Braby & Co., Ltd., pressed steel stairs; Benham and Sons, Ltd., kitchen equipment. Adamite Co., Ltd., "Colemanoid" retaining walls, "Atlas White" Portland cement stucco used for exterior, and "Atlas White" terrazzo floors and stairways (with Alundum non-slipping tile inset into the step treads). British Trolley Track Co., Ltd., Coburn system of sliding-door gear was used.

New Diphtheria Block, Isolation Hospital, Clatterbridge (page 824). General contractors, J. A. Milestone and Son, Ltd. Clerk of works, Mr. R. L. Tickell. Sub-contractors : Trinidad Lake Asphalt Co., dampcourses and asphalt; The British Reinforced Concrete Co., Ltd., reinforced concrete; Buckley Junction Brick Co., bricks; Storeton Quarries, stone; Warrington Slate Co., Tyrch slates; Granwood Flooring Co., Ltd., Granwood flooring blocks; Diespeker & Co., Ltd., terrazzo; Young, Austen and Young, central heating; E. A. Clark, Ltd., grates and mantels; Kissack and Yates, electric wiring and telephones; British Thomson-Houston Co., Ltd., electric light fixtures; R. W. Haughton, plumbing; Robert Dunlop, sanitary fittings; Quiggin Bros., Ltd., door furniture; Adams Bros. (Liverpool), Ltd., plaster.

Morleys, Great Hallingbury (pages 831–833). General contractors, J. L. Glasscock and Sons' Successors. Sub-contractors: G. M. Callender & Co., Ltd., "Ledkore" dampcourses; Hollis Bros. & Co., Ltd., oak boarded flooring; Richard Crittall and Sons, Ltd., central heating and boilers; Geo. Wright (London), Ltd., stoves and grates, and sanitary fittings; Grierson, Ltd., electric wiring; Galsworthy, Ltd., electric light fixtures; J. W. Gray and Son, lightning conductor; Carter and Aynsley, Ltd., and Roanoid, Ltd., door furniture; S. Haskins and Bros., Ltd., rolling shutters; G. I. Green, plaster; W. Aumonier and Sons, carving, decorative plaster and mantels; Art Pavements and Decorations, Ltd., tiling; J. P. White and Son, Ltd., gates; United Water Softeners, Ltd., water-softening plant.

ANNOUNCEMENTS

The Second Convention of the British Glass Industry will be held at Buxton from September 17 to 20, 1930.

Mr. Robert Atkinson, F.R.I.B.A., has removed his offices from 36 Bedford Square, W.C.1, to 126 Wigmore Street, W.1. Telephone number : Welbeck 4116.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The BATTERSEA B.C. has obtained sanction to borrow £4,330 for the extension and alteration of the maternity hospital at Bolingbroke Grove.

Buildings are to be erected by Hay's Wharf, Ltd., upon the site of St. Olave's Church in Tooley Street, BERMONDSEY.

Plans passed by the BERMONDSEY B.C.: Drainage, 41 and 43 Tower Bridge Road, for Mr. G. H. Goldsmith (architect); premises, Tower Bridge Road, and building, Caroline Court, Jacob Street, for the superintending architect of the L.C.C.; garages, store and office, rear of 154 to 172 Tooley Street, for the Governors of Christ's Hospital.

Mr. G. W. Peachey is to erect thirty-eight houses on the Croham Valley estate, SOUTH CROYDON.

Messrs. Chart, Son and Reading are to erect approximately 100 houses on the Oak Garden estate, CROYDON.

Mr. W. Newcome Wright, architect, is to prepare plans for the erection of forty shops at Watling Avenue, Burnt Oak, EDGWARE.

Messrs. Adams, Holden and Pearson, architects, are to enlarge the Belgrave Hospital for Children, KENNINGTON.

A row of fifty garages is to be erected in Buckingham Road, KINGSTON.

The POPLAR B.C. Electricity Committee has sold land in Weston Street, BROMLEY, to the Central Electricity Board for the erection of a transformer sub-station.

The governors of the Sir John Cass Technical Institute, CITY OF LONDON, have in view a proposal for the erection of new premises, at a cost of £66,000.

In connection with the reconstruction of Euston Square railway station, the L.C.C. is to widen EUSTON ROAD, at a cost of £26,000.

The London Midland and Scottish Railway Company has prepared a scheme for the remodelling of the Broad Street Goods Station. The proposals provide for the linking up of the Broad Street station with the warehouse on the other side of FINSBURY Avenue, by means of low-level and high-level railway tracks, and for the consequent bridging over of a portion of Finsbury Avenue.

Plans passed by the FULHAM B.C.: Additions, public-house, 37 North End Road, for Mr. G. Barker; new buildings, Ranelagh Gardens, for Messrs. C. and E. Joseph; new offices, Parsons Green Lane, for Messrs. MacLaughlin and Harvey; building, Hammersmith Road, for Mr. W. E. Sanders; additions, 547 Fulham Road, for Mr. C. T. Meacham; new building, site adjoining the Munster Park Wesleyan Church, Chesilton Road, for Mr. J. R. Wills.

The arbitrator has made an award of £49,430 as the purchase price of the Swan Brewery site, which is being acquired by the FULHAM B.C. for a housing scheme. The claim was for £90,000.

The Lambeth B.C. is to erect sixteen flats in Denmark Street, HERNE HILL.

Plans passed by the LEWISHAM B.C.: Shops and flats, Bromley Hill, for Mr. A. Frampton; streets, Crofton Park Estate, for Messrs. H. Cheston and Son; additions, the Foresters' Tavern, Perry Vale, Forest Hill, for Messrs. Hoare & Co., Ltd.; nineteen houses, Malyons Road, for Mr. P. B. Dannatt.

The MARYLEBONE Borough Council is to widen Marylebone Road, near the Hotel Great Central, at a cost of £8,000.

Plans passed by the MARYLEBONE B.C.: Erection of Cumberland Palace hotel, Oxford Street, Great Cumberland Place, Old Quebec Street and Bryanston Street, and building 4 and 5 Marble Arch and 1-5 Great Cumberland Place, for Mr. F. J. Wills; rebuilding, 8-10 Beaumont Street, for Messrs, Pite, Son and Fairweather.

Mr. Robert Cromie has prepared plans for the erection of a cinema at NEW SOUTHGATE.

The Croydon Education Committee is to erect a junior school for 350 at Kensington Street, NORBURY.

The SHOREDITCH B.C. has passed plans, prepared by the borough engineer, for the proposed women's hospital and new dental hospital. The estimated cost of erecting the building, which it is proposed to carry out by direct labour, is £9,000.

The ST. PANCRAS B.C. is to erect new offices for the depot staff storekeeper and deputy borough engineer and surveyor, and construct garages at James Street, at a cost of £4,500.

Plans passed by the ST. PANCRAS B.C.: Motor-coach station, Euston Road, between Chesterfield Street and Belgrave Street; building, 338–340 Gray's Inn Road; building, site at Gordon House Road; additions, 139–140 Tottenham Court Road, abutting upon Beaumont Place; building, 303 and 305 Euston Road.

EASTERN COUNTIES

The Essex Education Committee has approved plans for the erection of an elementary school at CHINGFORD, at a cost of £16,000.

The Essex Education Committee has obtained land for extensions at the High Road Council school, LAINDON.

The Essex Education Committee has passed plans for extensions at LEYTON county high school for girls, at a cost of £17,000.

The Essex Education Committee is to enlarge the Havering Avenue school, ROMFORD, to provide additional accommodation for 900 pupils.

The Essex Education Committee has acquired a site in Kipling Street, TILBURY, for the erection of an elementary school.

SOUTHERN COUNTIES

The Kent C.C. is to widen the railway bridge near BOROUGH GREEN station, at a cost of £4,500.

The BOURNEMOUTH Corporation has received sanction to borrow £6,000 for reconstruction work at Fisherman's Walk.

The BOURNEMOUTH Corporation is seeking sanction to borrow £11,425 for the purchase of 4 to 14 Cotlands Road, required for fire brigade purposes.

Plans passed by the BOURNEMOUTH Corporation: Additions, Bryanstone Road and Wimborne Road, for Messrs. Barclays Bank, Ltd.; office, Derby Road, for Mr. A. E. Horspool; shop, Wimborne Road, for Mr. F. A. Roscoe; conversion into shops, Wimborne Road, for Mr. P. Vass; house, The Avenue, for Mr. H. Masters; conversion into shops, 5 and 7 Richmond Park Road, for Messrs. S. E. King and J. Saunders; additions, South-Western Hotel, Northcote Road, for Messrs, Eldredge, Pope & Co., Ltd.; alterations and additions, 631 Christchurch Road, Boscombe, for Mr. F. N. Corben; alterations, 609–613 Christchurch Road, for Messrs. F. W. Woolworth & Co.; shops and flats, Tuckton Road, for Mr. A. H. Parks; shop, Commercial Road, for Messrs. Marks and Spencer; house, Harbour Road, for Mr. Hughes; house, Cellars Farm Road, for Mr. E. Jenkins; two houses, Castle Lane, for Mr. Roscoe; eighty-eight houses, Castle Estate, for Mr. J M. Leyland; business premises, Westover Road, for Mr. S. B. Parsons; house, Glenferness Avenue, for Messrs. G. E. and W. R. J. Lambert; house, Cobham Road, for Mr. Whitehead; two houses, Stephenson Road, Southbourne, for Mr. G. F. Hirst; house, Broad Avenue, Queen's Park, for Mr. E. Duss; house, Portman Crescent, for Mr. J. M. Whitehouse; two houses, Leigham Vale Road, for Mr. F. W. Woods; house, Award Road, for Mr. W. E. Luckham; house, Thistlebarrow Road, for Mr. E. Ridout; house, Fernside Road, for Mr. F. W. Holloway; house, Broadlands Avenue, for Mr. F. J. Webb; house, Castle Lane, for Mr. G. Stanner; house, Pettit Road, for Mr. R. Straker; twenty houses, Claremont Avenue, for Mr. S. G. Ward; two houses, The Grove, Moordown, for Mr. A. F. Holly; Baptist Church, Cardigan Road, for the trustees; two houses, St. Luke's Road, for Mr. F. House; bungalow, Hillcrest Road, for Mr. J. P. Pewtress; house, Carbery Avenue, for Mr. A. Webb; house, Alumhurst Road, for Mr. H. Solomon; four houses, The Avenue, Redhill Park, for Mr. H. Masters; roller-skating rink, Wycliffe Road, for Mr. J. M. Blackwell; additions, 238 Old Christchurch Road, for Messrs. Crawshaw and Son; house, Strouden Avenue, for Mr. Adams; bungalow, Elms Way, for Messrs. Bannings; house, Priory View Road, for Messrs. Symes, Chisham and Saunders.

The Kent Education Committee is to erect an elementary school in Mayplace Street, CRAYFORD.

The Kent C.C. is seeking sanction to borrow £6,000 for the erection of a nurses' hostel at LENHAM sanatorium.

Plans passed by the NORTHFLEET U.D.C.: Two houses, Park Avenue, for Mr. Johncock; house, Singlewell Lane, for Mr. R. Stubbs; garages, Perry Street Road, for Messrs. A. and H. Hardy; house, Park Avenue, for Mr. G. W. Offin; six houses, Park Street, for Mr. Oxley.

The Kent Education Committee has obtained an alternative site at ORPINGTON, for the erection of a central school.

The Kent Education Committee has obtained a site at YALDING, for the erection of a central school.

SOUTH-WESTERN COUNTIES

The PAIGNTON U.D.C. has now approved the sketch plan of the concert pavilion proposed to be erected at Paignton Green, and has decided to invite local architects to submit competitive designs.

Plans passed by the PENRHYN U.D.C.: House, Barco, for Mr. John Thornborrow; eight houses, Norfolk Road, for Penrith Co-operative Society; office, Gilwilly Lane, for Mr. T. Langley; twelve houses, Croft House Estate, for Lords Estates, Ltd.

MIDLAND COUNTIES

Plans passed by the BEDFORD Corporation: Rebuilding the Stanley Arms, Harpur Street, for Messrs. Usher and Anthony, for Messrs. C. Wells Ltd.; four houses, Southville Road, for Mr. E. H. C. Inskip; house, Winifred Road, for Mr. G. J. Tucker; house, Kimbolton Road, for Mr. W. Laughton.

The BEDWORTH U.D.C. is to undertake the erection of waterworks, at a cost of £17,000, which includes the construction of a reservoir at Newdigate.

Plans passed by the GLOSSOP Corporation: Alterations and additions, Howard Street premises, for the Glossop Carriage Co., Ltd.; alterations and additions, Whitfield Wesleyan Church, Hague Street, for the trustees; house, Newshaw Lane, for Mr. J. Wood.

The Warwickshire Education Committee has decided to proceed with the erection of the proposed high school for girls, at SOLIHULL.

NORTHERN COUNTIES

The North Riding Education Committee is acquiring a site at GRANGETOWN, for the erection of a senior school.

The SOUTH SHIELDS borough engineer has prepared a scheme for clearing the Thames Street unhealthy area.

The SOUTH SHIELDS Corporation has approved plans submitted by Mr. S. Shepherd, of alterations to the Pavilion Theatre, Derby Street.

Plans passed by the SOUTH SHIELDS Corporation: Alterations, Old Mill Inn, Hardwick Street, and bungalow, St. Peter's Avenue, for Messrs. T. A. Page and Son; alterations, Fletchers Inn, Catherine Street, for Mr. J. Gordon Durham, for Messrs. R. Fenwick & Co., Ltd.; junior schools, Cleadon Park, for Messrs. J. Morton and Son, on behalf of the Education Authority; extension to premises, Market Place and King Street, for Messrs. Croftons, Ltd.; shop, Park View, Harton, for Mr. Howard Hill, on behalf of Messrs. Lock Bros.; alterations, 127, 129 and 131 Maxwell Street, and new mission hall, for Mr. Howard Hill, on behalf of the trustees of Bethesda Church.

The SUNDERLAND Corporation is preparing plans for the extension of the mental hospital.

The TYNEMOUTH Corporation has approved a scheme for the erection of 100 four-roomed non-parlour, three-bedroom type and 100 three-roomed, non-parlour, two-bedroom type self-contained houses at Balkwell.

The TYNEMOUTH Corporation has approved a plan prepared by the borough surveyor, for a new retaining wall and layout of the sea front at Cullercoats, at a cost of £11,000.

Plans passed by the TYNEMOUTH Corporation: Alterations, Borough Theatre, North Shields, for Mr. J. L. Rose, on behalf of the Gaumont British Picture Corporation, Ltd.; two houses, Manor Estate, for Mr. W. Stockdale; nine houses, The Broadway, Cullercoats, for Mr. J. R. Wallace; shops, Albion Road, North Shields; alterations, Turk's Head Hotel, Front Street, and offices, Church Way, North Shields, for Messrs. F. R. N. Haswell and Son; fourteen houses, Balmoral Gardens, North Shields, eight houses, Brightman Road, houses, Queen Alexandra Road, and additions, Brewer's Bank, North Shields, for Mr. A. K. Tasker.

WALES

The SWANSEA Corporation has approved plans, submitted by the architect, for a nurses' home and admission block at the mental hospital.

Plans passed by the SWANSEA Corporation: Petrol depot, Neath Road, Llansamlet, for the Russian Oil Products, Ltd.; five houses, Dyfatty Street, for Swansea Hide and Skin Co.; two roads, Manselton Estate, for Sir C. Mansel; fifty-six houses, Penlan Road, Treboeth, for Mr. Ll. L. Thomas; bakery technical college, Mount Pleasant, for the Education Committee; alterations and rebuilding, 7 and 8 Castle Street, for Messrs. Burton, Ltd.; house, Brynhyfryd Street, for Mr. W. D. Williams; house, Bethel Road, Llansamlet, for Mr. T. J. Phillips; store, Pwll Street, for Mr. E. Spooner; two houses, Trewyddfa Common, Plasmarl, for Mr. B. Hughes; house, Vicarage Road, for Mr. J. T. Jones; house, Cwbath Road, for Mr. D. Roberts; four houses, Vicarage Road, Morriston, for Mr. David Rosser; house, Clydack Road, for Mr. A. Arnold; two houses, Heol-y-Cnap, Treboeth, for Mr. Evan Davies; alterations and additions, Mariner Street, for Messrs. Geo. Williams & Co.; house, Bonymaen Road, for Mr. D. R. Owen; house, Llangyfelach Road, Clasemont, for Mr. A. V. Mort; fifty houses, Carnglas Estate, for Messrs. T. and G. Spragg; two houses, Gower Road, for Mr. W. G. Connick; two houses, Pinewood Road, for Mr. John Davies; four houses, Lon Cedwyn, for Mr. A. E. Wright.

THE PUBLISHER'S PAGE

READERS of the JOURNAL will have noticed the photographs of some attractive old bridges which appeared in a recent issue. These were taken from the collection of Mr. E. Jervoise, A.M.INST.C.E., who for the last four years has been making a survey of the ancient bridges of England on behalf of the Society for the Protection of Ancient Buildings. This survey is now complete so far as the South of England is concerned, and the fruits of it are being published by the Architectural Press in book form on Friday next, under the title, *Ancient Bridges of the South of England*. The book contains much interesting historical information, and reference is made to practically all the ancient bridges which still exist, whilst about eighty photographs are included in the illustrations.

If readers of the JOURNAL were asked to guess at the number of ancient bridges still surviving in the country, the most widely divergent estimates would be received. It may be a matter of surprise to some to hear that in this book, which deals only with the counties south of the Thames, Mr. Jervoise makes reference to no fewer than 400 different bridges.

The book is of handy pocket size, and in order to make its appeal as wide as possible is being issued at the popular price of 5s. 6d.

THERE are many good things, [of which the following are a few particulars, in the June issue of THE ARCHITECTURAL REVIEW: Evelyn Waugh contributes a racy article in which he describes his search in Barcelona, during a brief visit, for buildings designed by Gaudi, the Spanish architect, who died about five years ago. The article is illustrated with views of the *Parc Guell* and *The Temple of the Holy Family*, the two most important of Gaudi's works. Another feature, of special interest to those who have a thought for the beauty of our towns and countryside, is a telling satire in words and pictures on Oxford, with special reference to the adjoining village of Cowley.

The drawings in the Architectural Room of the Royal Academy form the subject-matter of an amusing and informative article by Mr. Trystan Edwards, who overhears the pictures criticizing one another, and in another article Mr. Raymond Mortimer returns to the attack on the policy of the officials of the Royal Academy, and explains why the works of the most serious English artists are never represented in these exhibitions.

The coincidence of the Exhibition of Architects' Drawings made from 1800 to 1850, now being held at the Royal Institute of British Architects, with the summer exhibition at the Royal Academy, affords Mr. Raymond Mortimer the opportunity of comparing the quality of architectural draughtsmanship in the nineteenth century with that of our own day, in a series of comparative illustrations which are accompanied by his critical notes.

Adam Prosser writes succulently on the possibilities of sporting subjects as motifs for interior decoration, and illustrates some rugs, curtains, wall-papers, etc., in which the idea has been carried out.

In addition, the issue contains illustrations of new buildings, and another article in Mr. Nathaniel Lloyd's series, "A History of the English House," accompanied by further illustrations of Palladian and Georgian houses.



Evelyn Waugh, from a painting by Henry Lamb.

THE great summer migration to Stockholm is about to commence. One wonders how many architects who habitually go abroad for their holidays will visit Sweden this year? The exhibition of Swedish Arts and Crafts is proving an attraction the like of which has not been seen for a long time. Readers of the JOURNAL and REVIEW who are thinking of going may obtain any information they require by writing to the Architectural Press, 9 Queen Anne's Gate, S.W.1. For the novice we may point out that transport is available by air, land and sea. Those who are in a hurry may leave London at half-past ten in the morning, lunch at Amsterdam, dine at Malmö, turn in on a sleeper (the Swedish State Railways sleepers beat any others on the Continent) and wake up in Stockholm just after eight o'clock the following morning—a little under twenty-two hours. For those who are indifferent sailors there is the Dover-Calais Channel crossing, comfortably brief, and the Sassnitz-Trälleborg train ferry, which involves another four hours on the water. All the rest may be done by train. The Harwich-Hook of Holland or Harwich-Flushing routes take you into the North Sea, and if you do not mind this much, you will no doubt prefer the direct steamship route which involves very little more of it. There are two sailings weekly from London, and those who choose to travel at week-ends will get a foretaste of Swedish things going over in a ship decorated in Sweden.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_3	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_3	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_3	Atherstone	Mid. Counties	1 5½	1 1
B_3	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_3	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_3	Basingstoke	S.W. Counties	1 4	1 0
A_3	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_3	Bedford ..	E. Counties	1 5½	1 1½
A_3	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_3	Bewdley ..	Mid. Counties	1 6	1 1½
B_3	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_3	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_3	Boston ..	Mid. Counties	1 5½	1 1
A_3	Bournemouth	S. Counties	1 5½	1 1½
B_3	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_3	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_3	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_3	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_3	Brixham ..	S.W. Counties	1 3½	11½
A_3	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Bursiem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_3	CAMBRIDGE	E. Counties	1 5½	1 1
B_3	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_3	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_3	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_3	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_3	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_3	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_3	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_3	Crewe ..	N.W. Counties	1 6	1 1½
A_3	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_3	Deal ..	S. Counties	1 4	1 0
A_3	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_3	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_3	Exeter ..	S.W. Counties	*1 6	1 1½
B_3	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_3	Gosport ..	S. Counties	1 5½	1 1
A_3	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_3	Hastings ..	S. Counties	1 4	1 0
A_3	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_3	Ipswich ..	E. Counties	1 5½	1 1½
B_3	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_3	Lewes ..	S. Counties	1 3½	11½
A_3	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_3	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_3	Margate ..	S. Counties	1 4	1 0
A_3	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_3	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_3	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_3	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_3	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_3	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_3	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_3	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_3	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_3	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_3	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_3	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_3	Shrewsbury	Mid. Counties	1 6	1 1½
A_3	Skipton ..	Yorkshire	1 6	1 1½
A_3	Slough ..	S. Counties	1 5½	1 1
A_3	Solihull ..	Mid. Counties	1 6	1 1½
A_3	South'pton	S. Counties	1 5½	1 1
A_3	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_3	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_3	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_3	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_3	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_3	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_3	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			

Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0
Add to the foregoing prices, if in York stone, 35 per cent			
DO. Mansfield, 12½ per cent.			
Deduct for Bath, 33⅓ per cent.			
DO. for Chilmark, 5 per cent.			
SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6

RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies					£14	0	0		
Countess					23	0	0		
Duchess					32	10	0		
Old Delabole	*Med.*	*Grey*		*Med.*	*Green*				
24 in. × 12 in.	£42	11	3	£45	1	0			
20 in. × 10 in.	31	4	3	33	0	6			
16 in. × 10 in.	20	18	0	22	4	9			
14 in. × 8 in.	12	1	0	12	16	3			
Green Randoms, per ton				8	3	9			
Grey-green do., per ton				7	3	9			
Green peggies, 12 in. to 8 in. long, per ton				5	13	9			

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med.	*Grey*		*Med.*	*Green*	
24 in. × 12 in.	£5	0	0	£5	2	0
20 in. × 10 in.	5	5	0	5	10	0
16 in. × 10 in.	4	15	0	5	1	0
14 in. × 8 in.	4	10	0	4	15	0
Green randoms				6	7	0
Grey-green do.				5	9	0
Green peggies, 12 in. to 8 in. long				4	13	6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18s. 0d. per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued on page* xli

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1⅛ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
Do. ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 8¾d. *per hour*; MATE, *do.* 1s. 3½d. *per hour*; ERECTOR, 1s. 8¾d. *per hour*; FITTER, 1s. 8¼d. *per hour*; LABOURER, 1s. 3½d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9d. *per hour*; MATE OR LABOURER, 1s. 4d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in. each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 11½d. *per hour*; LABOURER, 1s. 3½d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 7½d. *per hour.*

Glass: 4ths in crates			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft	0	1	1
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span 1s. 6d. to 2s. per ft.			
LEAD LIGHTS, plain, med. sqs 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½d. to 8d. per ft. according to size.			

PAINTER AND PAPERHANGER.

PAINTER, 1s. 7½d. *per hour*; LABOURER, 1s. 3½d. *per hour*; FRENCH POLISHER, 1s. 8½d. *per hour*; PAPERHANGER, 1s. 7½d. *per hour.*

Genuine white lead, per cwt.	£3	0	2
Linseed oil, raw, per gall.	0	4	6
DO., *boiled, per gall.*	0	4	9
Turpentine, per gall.	0	4	7
Patent driers, per cwt.	1	10	6
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	2	2	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	6
DO., *flat, per gall.*	0	15	6
DO., *paper, per gall.*	1	2	6
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak												
1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak												
1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

BUILDING CONTRACTS OPEN

Unless the contrary is expressly stated, all deposits required for bills of quantities, etc., are returned on receipt of bona-fide tenders. The words "Fair Wages Clause" inserted in certain paragraphs signify that persons tendering must conform to a fair wages clause in the contract, which requires them to pay the rates of wages current in the district. Application for plans and particulars should be made to the address given at the end of each entry.

BOSTON : HOUSES

May 30.—For the erection of 112 houses on the Fenside Road housing site, for the T.C. D. G. Cockrill, Borough Surveyor. Municipal Buildings, Boston, Lincs. Deposit £2 2s.

WINCHESTER : HOUSES

May 30.—For erection of 132 houses at Milland Road, Bar End, Winchester, for the T.C. P. H. Warwick, City Engineer and Surveyor, Guildhall, Winchester. Deposit £2 2s.

STROUD : COTTAGES

May 31.—For erection of sixteen non-parlour type cottages at Cashes Green, and eight cottages of the same type at Brimscombe, for the Stroud R.D.C. R. Bird, Surveyor, Council Offices, Kendrick Street, Stroud, Glos. Deposit £2 2s.

PORTADOWN : PUMPING STATIONS

May 31.—For building three sewage pumping stations at (*a*) Bann Bridge, (*b*) Foundry, and (*c*) Annagh Bridge, at Portadown, Northern Ireland, for the U.D.C. Taylor and Wallin, Engineers, 1 Saville Place, Newcastle-on-Tyne. Deposit £5.

ALTON : BUILDINGS

May 31.—For the erection of new hospital (timber and corrugated iron) and covered way, and alterations to existing buildings, and preparation of site and construction of foundations for same, for the Alton Joint Hospital Committee. G. H. Webb, Surveyor, Town Hall, Alton. Deposit £1 1s.

LEEDS : HALL

June 2.—For erection of Congregational Church Hall and schoolroom at Stainbeck Road, Stainbeck, Leeds. Dinsley and Moss, Architects, 17 Union Street, Chorley, Lancs. Deposit 10s.

OUTWOOD : HOUSES

June 2.—For erection of forty-two non-parlour houses and necessary road works and sewers at Church Lane, Outwood, for the Stanley U.D.C. The Council's Surveyor, Council Offices, Coach Road, Outwood, near Wakefield. Deposit £2 2s.

ABERGAVENNY : HOUSES

June 2.—For the erection and completion of forty-four houses (twenty-four non-parlour and twenty parlour type) and incidental works in connection therewith, adjoining Bailey Park, Abergavenny, for the T.C. H. Hopwood, Town Clerk, Town Hall, Abergavenny.

MELKSHAM : HOUSES

June 2.—For the erection of thirty-two non-parlour semi-detached houses in concrete blocks in accordance with revised plans and all to be on their estate at The Forest, Melksham, for the U.D.C. R. P. Pearce, Town Surveyor, Town Hall, Melksham. Deposit £3 3s.

YEOVIL : OFFICES

June 2.—For erection of the following contracts for the T.C. :—(1) New offices for the health department; (2) central heating for the new health department offices; (3) additional cell at refuse destructor; (4) two conveniences, three shelters and dressing rooms at the Mudford Road recreation ground; and (5) extensions to Cattle Market. Tenders to be sent in by 9 a.m. on June 2 for (1), (2) and (3) and June 9 for (4) and (5).

LOCKERLEY AND BRAISHFIELD, HANTS : COTTAGES

June 2.—For erection of sixteen pairs of non-parlour-type cottages in the parishes of Lockerley and Braishfield on the following sites, for the Romsey R.D.C. : Four pairs on the site adjoining the East Dean Road, Lockerley; two pairs on the site opposite Butts Green, Lockerley; three pairs on the site adjoining Cooks Lane, Lockerley; four pairs on the site adjoining the Carters Clay-Newtown Road, Lockerley; and four pairs on the site at Common Hill Road, Braishfield. C. W. P. Dyson, Surveyor, Porters Bridge Street, Romsey. Deposit £2 2s.

CORICKBRIDGE, CO. TYRONE : SCHOOL

June 3.—For erection of a public elementary school at Corickbridge (two and a half miles from Newtownstewart), Co. Tyrone, for the Strabane and Castlederg Regional Education Committee. J. S. Lawson, B.E., Architect, Abercorn Square, Strabane. Deposit £2 2s.

BATH : TELEPHONE EXCHANGE

June 3.—For erection of a telephone exchange at Weston, Bath, for the Commissioners of H.M. Works, etc. The Contracts Branch, H.M. Office of Works, King Charles Street, London, S.W.1. Deposit £1 1s..

ORPINGTON, KENT : HOUSES

June 5.—For erection of sixty-four houses on the following sites, for the Bromley R.D.C. : Pratts Bottom, Chelsfield, twelve houses; Jail Lane, Biggin Hill, Cudham, eight; Cudham Village, four; Westerham Road, Keston, eight; Upper Ruxley, North Cray four; Homefield Rise, Orpington, eight; Willfield, St. Mary Cray, eight; and Crabbs Croft, West Wickham, twelve. The Building Surveyor, Council Offices, Orpington. Deposit £2 2s.

HOO, KENT : COTTAGES

June 9.—For erection of ten pairs of cottages facing the Rochester Road, in the parish of Hoo, being part of a proposed housing scheme of thirty-one pairs of cottages, for the Hoo R.D.C. W. J. Stimpson, Architect and Building Surveyor, Council Offices, Hoo, Rochester. Deposit £5 5s.

HEMEL HEMPSTEAD : HOUSES

June 10.—For erection of seventy-two houses, in pairs, in St. Paul's Road, for the Corporation. A. Murray-Smith, Borough Surveyor, Market Square, Hemel Hempstead. Deposit £7 7s.

KIMMAGE, IRELAND : HOUSES

June 11.—For erection of sixty-two houses at Kimmage, Co. Dublin, for the Irish Sailors' and Soldiers' Land Trust. W. J. Brown, Architect, 50 Upper Mount Street, Dublin. Deposit £5 5s.

NOTTINGHAM : HOUSES

June 12.—For erection of 347 houses of the small type on the Colwick estate, for the Housing Committee. T. C. Howitt, Architect, 58–59 Long Row, Nottingham. Deposit £1.

LEEDS : EXTENSION

June 16.—For the extension of the Colony for Mental Defectives at Meanwood Park, Leeds, to comprise the erection of adult blocks, children's blocks, lowest grade blocks, school, entrance lodge, etc., for the Mental Health Services Committee. The Executive Officer, Mental Health Services Committee, 38 Park Square, Leeds. Deposit £3 3s.

MEASURES BROS. 1911 LTD.

Section Sheets and Estimates on Application.



Telegrams : "Measures, Boroh, London."

STEEL JOISTS

Structural Steelwork — OF — Every Description.

Prompt Delivery from Stock at Lowest Market Prices.



Telephone No. : Hop 3985 (4 lines).

SOUTHWARK STREET, LONDON, S.E.



ENTRANCE TO THE REPTILE HOUSE, ROYAL ZOOLOGICAL GARDENS, REGENT'S PARK, N.W.

By

E. GUY DAWBER

IN his design for the new Reptile House for the Royal Zoological Society, Mr. Guy Dawber, a Past President of the R.I.B.A., has taken full advantage of the suggestions for amusing detail which are offered by the nature of the subject.

Close inspection of the drawing reproduced on the next page, in conjunction with the above photograph, will reveal the presence of many well-known reptiles, carved and used with decorative effect. Lizards and toads, snakes and chameleons, gambol and frolic to enrich the architrave which encloses the double entrances, while the keystone of the arched recess boasts a group of intermingled cobras.

To contrast with the richness of detail, the general expression is of a broad and simple nature; brick piers, with channelled panels on their faces, and with stone caps, support a well-proportioned stone cornice and pediment of generous projection, in the later-eighteenth-century manner, to accord with the architectural traditions of the neighbourhood.

Incidentally, the design as a whole shows how the duality of motive inherent in the double entrances has been overcome by containing them both in one large and dominant arched recess, the unity thus achieved being still further emphasized by the stone eye in the plaster tympanum of the pediment.

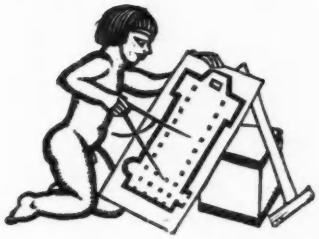
REPTILE HOUSE ZOOLOGICAL GARDENS N·W6

¼-INCH SCALE DETAIL OF MAIN ENTRANCE

E. GUY DAWBER
ARCHITECT



THE ARCHITECTS' JOURNAL



WEDNESDAY, JUNE 4, 1930

SKETCHING (FOR GOOD OR EVIL)

"The Town is full of Prout-bits"
—*Guide to Spain*: O'SHEA

WE do not know whether it were our own recent example in founding a sketch club which has fired the young architects of Reading to do likewise. We learn that they have gathered themselves into the "Ionic Architectural Club," which seems a model of its kind. Although its programme will certainly include caricatures of both the old-established architects and the more ancient buildings of the neighbourhood, the serious side of the endeavour is properly stressed and embraces conscientious study by means of lectures, competitions, drawings and any other means of furthering the art. The opening lecturer, Mr. Talfourd Cumming, very wisely, knowing that the young mind runs to detail, emphasized the need for recording such details faithfully. We hope his excellent advice was not interpreted to mean that detail was of first importance to the sketcher, or that the proper aim was at the pretty little piece or the "Prout-bit."

It is well recognized today that sketching has two objects. The first is such a study of the subject that the architect's difficulties and his success or failure can be properly understood; the second is to make a well-designed pattern, in other words a picture on paper, of the thing seen.

Undoubtedly, the first object is better attained by the study of a modern building than of an old one. We are more quickly able to appreciate the point of view of today, we know the pitfalls, and have smelt the powder of the up-to-date client's criticism; to see the best work of recent years is more educative than the easy enjoyment of ruins.

We suggest therefore to our young Reading friends that the most fruitful subjects of their studies will be, first, the modern houses of the Thames Valley, homes replete with every luxury in bathrooms and lounges, and with every labour-saving device short of robot servants in the kitchens; and secondly, the new factories between their city and London. From these can be learnt the lesson of proper location, the relation of site to lines of transport, and the layout of gardens and recreation grounds. Instead of a "Prout-bit" the first sketch will be a bird's-eye view.

There will arrive in the mind the appreciation of the plan, the importance of which was stressed the other day by Sir Giles Scott with a kind of monumental common sense in a letter to *The Times*. Then the view-point for the delineation of the actual building will be such as gives the best idea of the planning, and, with the sketch proceeding, the artist's mind will be at work seeing through some blank wall the reason why it is blank, for the accommodation of bookcase or sideboard, and remembering how the fireplaces are gathered into the groups which outside effect the dominance of chimneys; or realising the long benches of the workshops behind the long rows of factory chimneys, and the layout of the machines beneath the saw-tooth roofs.

It is not likely, alas! that we shall see an impression of Regent Street in a humorous sketch by Lutyens, or an ironical drawing of the new Olympia by Blomfield, though how truly critical such performances might be! But it seems extraordinary that we find so few renderings of good modern work when we look through the portfolios of the younger generation. Surely the clean contemporary "job" is as interesting as that with a lichenous past!

The second object of sketching is to make a picture. Such dabbling is not only the most delightful of hobbies, but the practice of design in another art. The mind is broadened in the process, however feeble or indelicate the touch. There are certain simple, sensuous qualities of architecture which can be best approached through sketching; colour, for instance, and texture. As well, in drawing architecture with the pencil, we learn the importance of what Le Corbusier calls "the directing line" of the building. It is possible to capture the whole spirit of the composition merely with the firmness and delicacy of the line, which is a shorthand interpretation of the design.

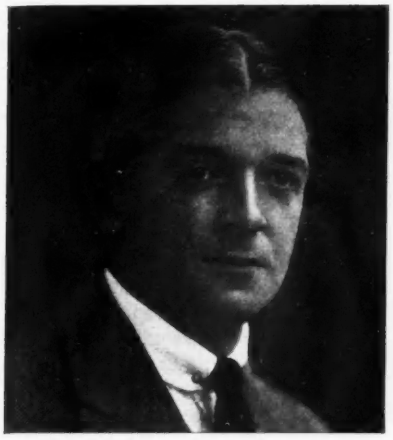
For to the architect design must always be present, and his art is an old fort set against chaos, and in every Gothic church he sketches he sees the joyful relief of men that the Dark Ages and barbarism had been rolled away.



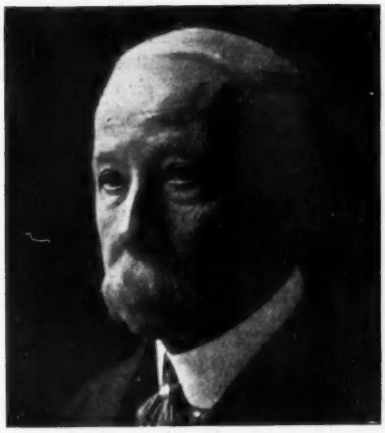
MEMORIAL TO MEN OF AN AMERICAN DIVISION WHO FELL IN FRANCE AT VARENNES-EN-ARGONNE, DESIGNED BY PAUL-PHILIPPE CRET

This monument to the Pennsylvanian recruits (28th and portions of the 79th and 80th American Divisions) is erected on the site of a public place destroyed by the enemy during the war, and was conceived to embellish and frame views of the surrounding country. It overlooks the river valley where the men advanced to the pursuit in September, 1918. A pair of pillared screens, terminating in pylons, one of which is seen, encloses a sunk lawn.

NEWS & TOPICS



Percy E. Thomas, O.B.E. (of Ivor Jones and Percy Thomas) whose winning design for the Accrington Police and Fire Station is reproduced on pages 862 and 863. He has been a member of the Council of the R.I.B.A. since 1922.



W. R. Lethaby, who delivered an address on "The Preservation of National Monuments" before the Society for the Protection of Ancient Buildings last week, was for many years architect to the Dean and Chapter of Westminster.

SCHEME FOR A NATIONAL THEATRE

THE committee appointed to devise an agreed scheme for the establishment of a National Theatre have drawn up a report and submitted it to the Government. The report suggests that capital could be found if the State would provide a grant to meet annual charges for interest and sinking fund over a few years, earmarking for this purpose some of the proceeds from the licences for wireless receivers, which already bring in a surplus of over £300,000 a year. This fund is not part of the general revenue from taxation, and might quite properly be used for the promotion of music and the drama.

★

The committee are of the opinion that a National Theatre is a practical proposition, though nothing can be said on the financial side until questions of site, cost of building and so forth have been settled. Their suggestions as to the type of building they have in view follow very closely the conditions laid down for the competition held a few years ago, and include one large auditorium to hold 1,800, and a smaller additional auditorium.

STONEWORK IN DECAY

Professor W. R. Lethaby, speaking at the annual meeting of the Society for the Protection of Ancient Buildings, made some interesting remarks on the subject of stonework. All stone is decaying—always, he said. It needs a protective skin which can be renewed from time to time if it is to last the centuries. Mediæval masons coated their stone with lime and whitewash, and they painted and gilded their stone, not alone for decoration's sake, but as a preservative. We think whitewash today only worthy pigsties and cottages, but if we had common sense instead of taste we would whitewash the Houses of Parliament instead of spending a million on renewing their decayed stonework. The avoidance of decay should be one of the guiding principles of design—not how to use so much Portland stone, but how to keep it. Nevertheless, things do decay, and without decay stone has no virtue or depth or colour. And were it not for decay there would be no society to protect ancient buildings.

★

One of Professor Lethaby's incidental comments was somewhat arresting. He thought it rather curious that we seemed to be much more sensitive of injuries to ancient works of art when travelling abroad than when we were at home. "I have read," he said, "keen observations on dreadful things done in France, Italy and Germany. But such doings seem different in our own cities, and we prepare the way by calling them 'necessary improvements.'" I am not so sure that this indictment has the same validity today that it had, say, even ten years ago. There has been a rapid awakening of the public conscience in matters artistic, thanks to the exertions of the numerous societies who have made preservation their watchword. But, of course, it is quite in our national character to tend to rank foreign art above our own.

A SCHOLARSHIP IN RESTORATION

The chairman of the same meeting announced the decision of the Society to institute a scholarship which has as its purpose the training of a young architect in the repair and restoration of ancient buildings. This is, I think, a very sensible and generous use of the Society's funds, and one which with good fortune may bring them an accession of well-trained enthusiasm which they are well able to make of real value to them in their good work.

ACADEMICIANS "ON PROBATION"

It does one good to read one of Richard Sickert's harsh, unpolished criticisms of contemporary institutions. His recent castigation of the Royal Academy is full of point, especially in the matter of superannuation and the Associateship. As he says, the older members are quite often the most accomplished artists and the most experienced organizers, while the idea of probationership in matters of art can never be applied to members of a national academy. The Associateship should be dropped, and some form of alphabetical order should govern the hanging of works.

COMPETITIONS THAT ARE BANNED

The frequency with which it is announced that such and such a competition is barred to members of the R.I.B.A. because the conditions do not conform with the regulations laid down by the Council is rather surprising. I have never personally followed any one particular case and cannot remember whether the lost sheep have usually been shepherded into the fold, or how rigidly party discipline has been maintained after the issue of a warning. It would be of real interest to know the nature of the common transgression, and how far successful are the efforts of the R.I.B.A. to impose their authority.

A CODE OF STEEL BUILDING

A letter to *The Times* brings into prominence the lack, until now, of a national code of steel-frame building. Not only are building bye-laws dumb on the subject, but there have been no agreed basic principles of design, the steelwork engineers having been satisfied to take the back seats and sing

seconds to the architects' lyric airs. And the architects have been so used to the arrangement that they have seen nothing significant in the curious bunglings which brought stability to their composite structures at the price of all suavity, and certainty of purpose in the internal arrangement of them.

*

The engineers are now taking the lead in this matter; steel must be treated with respect and an ideal code of construction laid down. Today neither stone nor steel is master, and each bungles the other where both might work in harmony.

A COLD-WATER SHAMPOO

It has been suggested by an architect in Manchester that cold-water washing would make a world of difference to the grimy façades of that city, and it has been further suggested that the Fire Brigade are the right people for the job, working on quiet Sunday mornings. While I think that firemen should be paid for putting out fires and for nothing else, I think the cold-water treatment is the most effective and least damaging method of keeping stonework clean. Against the heavy chemical deposits of centuries cold water makes little headway, and is better employed on newer buildings. Upon these the work can be done rapidly and, as one may see on the screen between the Office of Works and the Foreign Office, very effectively. It is much cheaper than any other method, and can be done by the house staff of any large building or corporation.

THE ISSUE OF CHARING CROSS

By the time these lines appear in print the Charing Cross Bridge dilemma will have been resolved. It seems almost certain now that the L.C.C. will not attempt to get their obnoxious Bill recommitted to Parliament. The chances of its passage are thought to be too slender. Instead, the whole subject will be reconsidered by an advisory committee, if the Council take the advice of their own Improvements Committee. Under an independent chairman would be convened representatives of all parties interested, including the Royal Fine Arts Commission, the Royal Academy, the R.I.B.A., the Institution of Civil Engineers, the Surveyors' Institute and the Town Planning Institute, their report being due in nine months' time.

*

Such a decision would do honour to the common sense of all concerned, and it seems not unreasonable to hope that the opportunity afforded of doing a fine thing well may yet not slip through our fingers. Everyone is agreed that a road bridge at Charing Cross is a pressing necessity of our Metropolitan life; we should get a monumental scheme for the £12,500,000, which is the limit of cost in view.

A NOTABLE ARTS AND CRAFTS EXHIBITION

The exhibition of students' work at the L.C.C. Central School of Arts and Crafts, opened last week, shows how efficiently the school is carrying out its objects of helping British handicrafts and industries by maintaining ancient traditions and furthering modern development in design and workmanship. It is a school solely for the education of art and craft workers, and the exhibits include silversmith's work, textiles and costumes, painted and sculptured architectural decoration, stained glass and mosaic, furniture, book production, engraving and lithography. All the work shown is of the most advanced type and is executed from beginning to end by the individual student himself. Among the exhibits I liked the best were the studies in lithography by G. W. Morries, of *Punch*, and E. Clark Hall, the unusual drawings of animals by B. Purvis, the bookbinding by G. Wilkins and T. G. E. Smith, the architectural model of an inn in Wiltshire by J. W. G. Smith, the modelling in pottery by A. Allinson, and the aquatints by Clifford Webb.

HEREFORD'S BISHOP'S PALACE

The Ecclesiastical Commissioners have now power to contribute towards the repair of such a notable architectural treasure as the palace of the Bishop of Hereford. This lies just away from the busy streets. Part of the building, notably the timbered hall, dates from the latter part of the twelfth century. Today, after 750 years, three arches and five pillars bear the whole weight of the roof. This is a unique building. The only other similar Norman woodwork to be found in this country is a pillar at Farnham Castle and two bays of an old tithe barn which stood until recently in Suffolk. The arches of oak in the hall or eastern range of the palace each have a span of twenty-one feet.

MUNICIPAL ARCHITECTURE IN BOMBAY

I noted some months ago a proposal that the Bombay Corporation should establish an architectural branch. The Municipal Commissioner, who was asked to report on the subject, has now reported that the idea that municipal buildings should as far as possible be designed on sound architectural lines has always been kept in view in designing the buildings so far erected. The Corporation will agree, he says, that architectural designs mean extra expenditure, and in these days of financial stringency it has been found necessary to strip the buildings as much as possible of the architectural features and ornaments but not so as to make them ugly (!). The present staff of the architectural branch is quite capable of designing buildings in any style, and the appointment of a person holding the A.R.I.B.A. diploma would only entail heavier expenditure on account of higher pay without adding in any way to the efficiency of the department. The department is not wanting in men with necessary qualifications, he concludes, as there are at present two persons with the Government Diploma in Architecture and four who have passed the old Advance Examination in Architecture. All of which strikes me as very deplorable.

EXTRAVAGANZA IN ANTWERP

A speculative builder of Antwerp, who had put up some flats on the outside of the city, suddenly saw wealth coming to him in the shape of the exhibition, whose site was intended to cover his little speculations. He was a greedy fellow, was this builder, and thought he could hold out a bit on a rising market. The authorities couldn't wait, however, and did not buy. Instead, they proceeded to erect the wall of their exhibition, cementing the flats into it securely at each end.

Now the poor tenants have floodlights playing on them into the small hours, and their friends—if they care to undergo the trial—must either pay at the entrance gates when they come on a visit, or be escorted by vigilant guardians who take care that no one may enjoy the wonders without payment. Meanwhile the builder sleeps of nights, for he has heard that the district is to become a garden suburb. He sleeps, and dreams dreams that would shock you or me, gentle reader.

ASTRAGAL

CECIL SHARP HOUSE, REGENT'S PARK, N.W.

Headquarters for the English Folk Dance Society

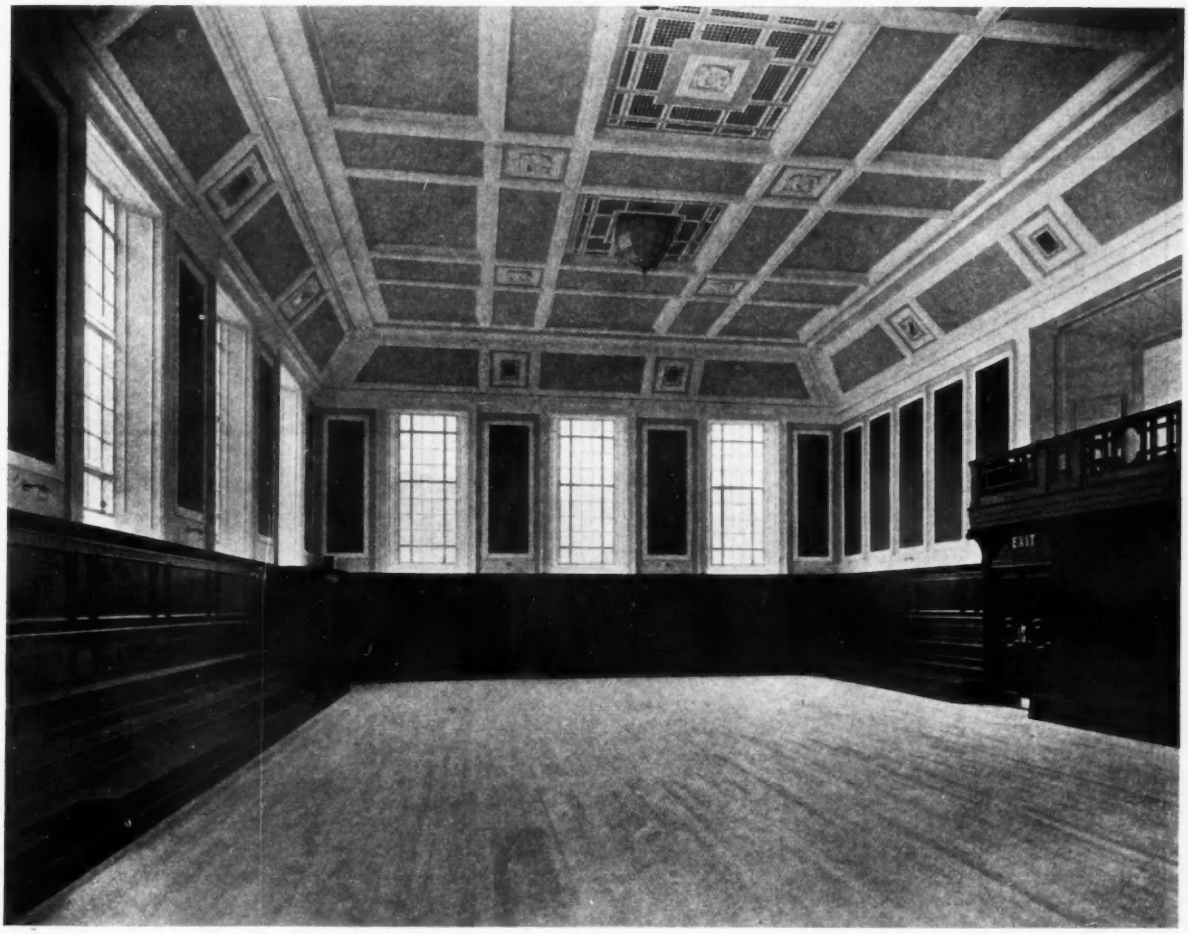
DESIGNED BY H. M. FLETCHER AND GODFREY PINKERTON

ON Saturday afternoon, June 7, the Rt. Hon. H. A. L. Fisher will open Cecil Sharp House, and formally give it into the keeping of the English Folk Dance Society. No better tribute could have been offered in memory of the great work of the late Cecil Sharp, fulfilling as it does his ambition to found a national building to provide headquarters for the Society and a common centre for the English traditional arts.

The building stands on a corner site on the northern border of Regent's Park, London, and provides a main dance hall, perhaps the first of its kind to be erected specially for folk dancing, two classrooms, a library, buffet, changing rooms and administrative offices. On the south-east corner of the site is an open-air theatre, which can be approached from two pathways, one on each side of the building, and from two doorways from the main dance hall.

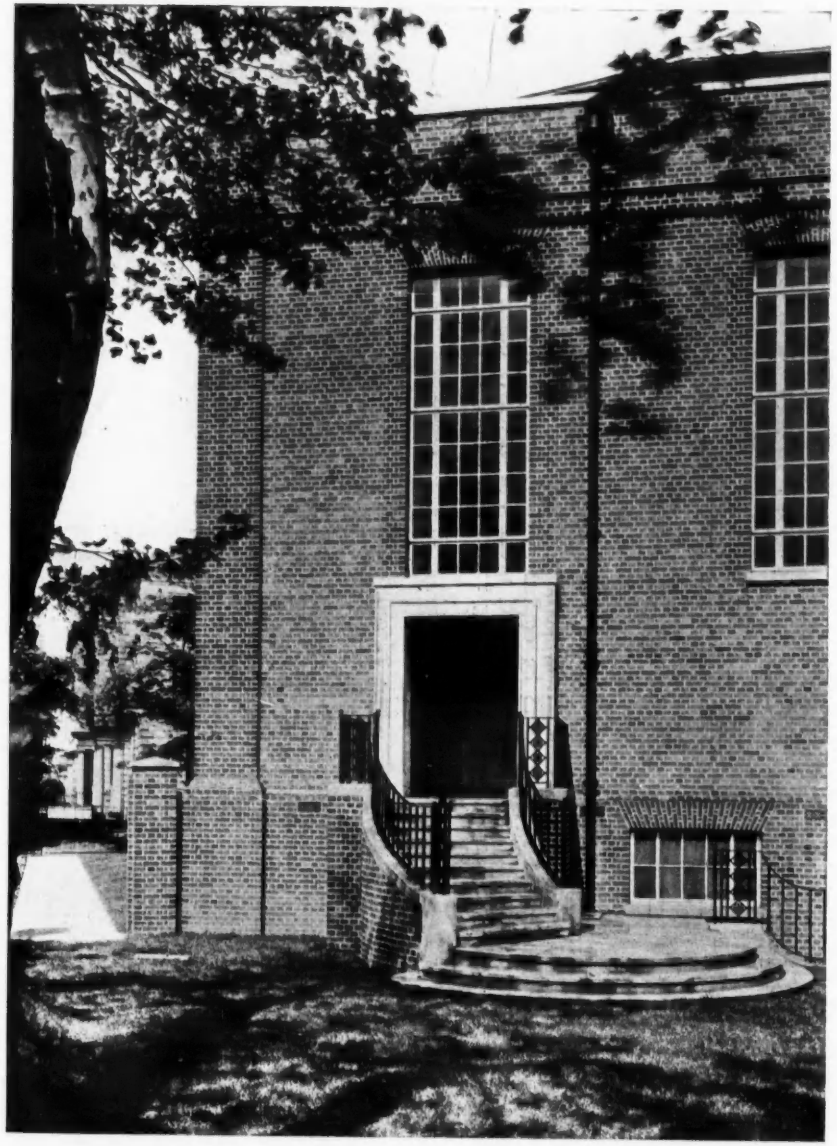
The large classroom in the semi-basement, called the Trefusis room, like the main dance hall, has a semi-sprung floor of pine. It is, however, somewhat different in decorative treatment. The walls and ceiling are in similar colours to those of the main dance hall (see illustration on this page), but the doors are of a brilliant red, picked out in black, and having a black surround. The chairs also are in red.

On one side of the classroom is the men's changing room, and on the other the women's. These rooms, also given a colour scheme in red, cream and broken white, are fitted with the most modern appliances, including shower baths.



The main dance hall has a musicians' gallery and two permanent tiers of seats. It is probably the first hall to be erected to meet the special requirement of folk dancers. The floor is of pine, and is semi-sprung. All the woodwork, including the seating, is of pine, stained oak colour. On the upper part of the walls and on the slope of the ceiling are acoustic panels. Electric lighting is from portholes in the slope of the ceiling, augmented by two central ceiling lights, silver coloured. The decoration is in cream and white.

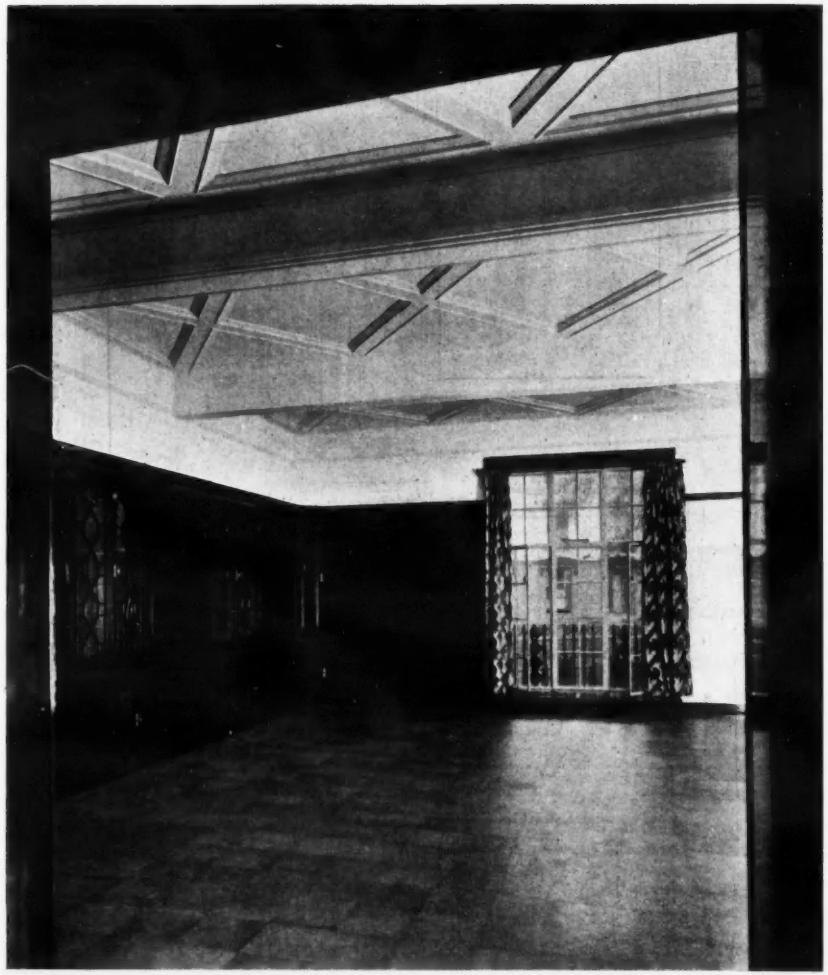




The main entrance; and one of the exits, with curved stairs, from the main dance hall into

which in plan are curved one towards the other. The building is constructed of rusticated

The main entrance; and one of the exits, with curved stairs, from the main dance hall into the open-air theatre. As will be seen from the plan (page 856), there are two exits from the hall into this theatre. They are both of similar design, except as to the stairs, which in plan are curved one towards the other. The building is constructed of rusticated bricks, with English Portland stone dressings. The roof is covered with slates in graduated courses, and the railings are in wrought iron. The windows are of metal; the doors of teak.

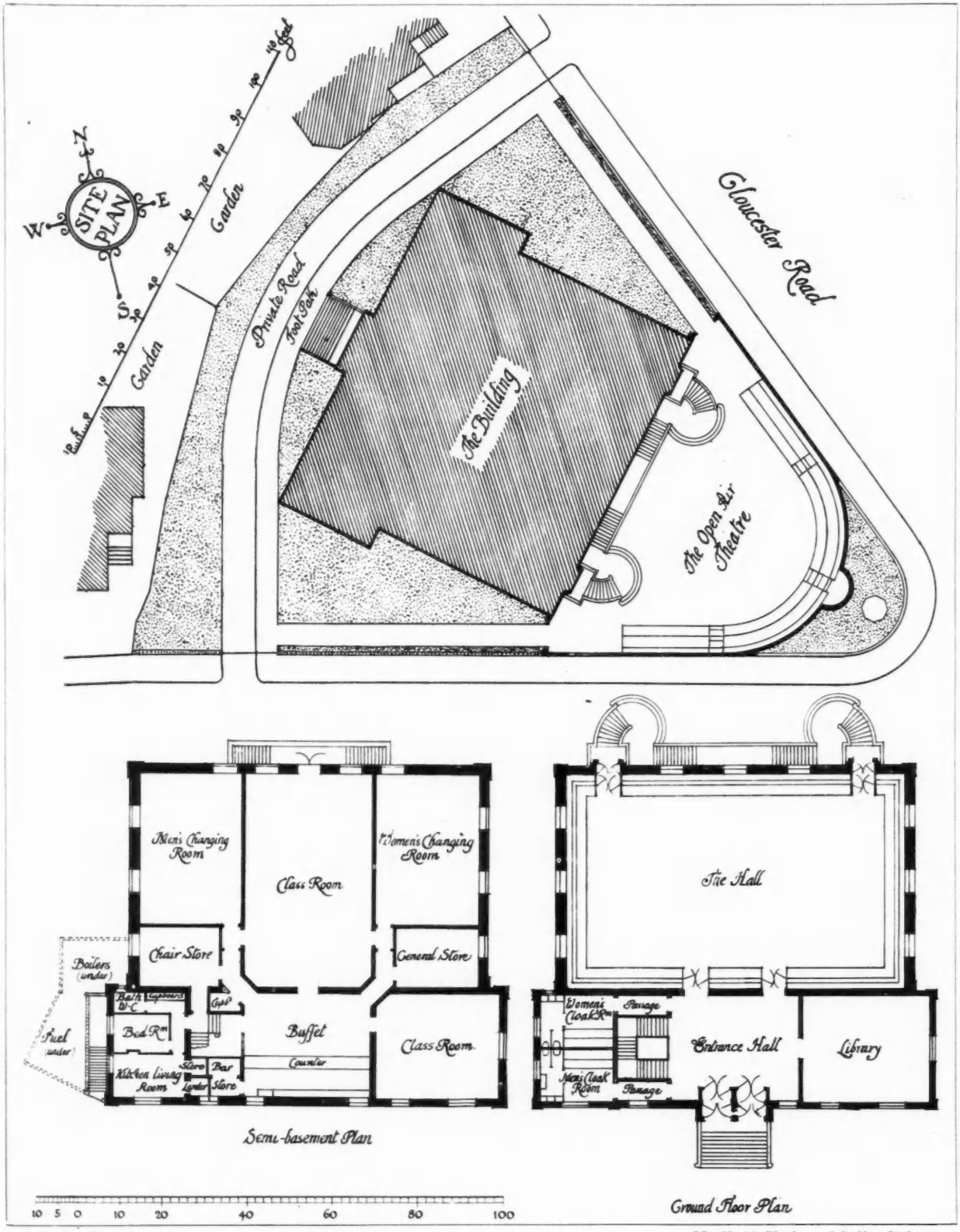


Cecil Sharp House.]



[*By H. M. Fletcher and Godfrey Pinkerton.*

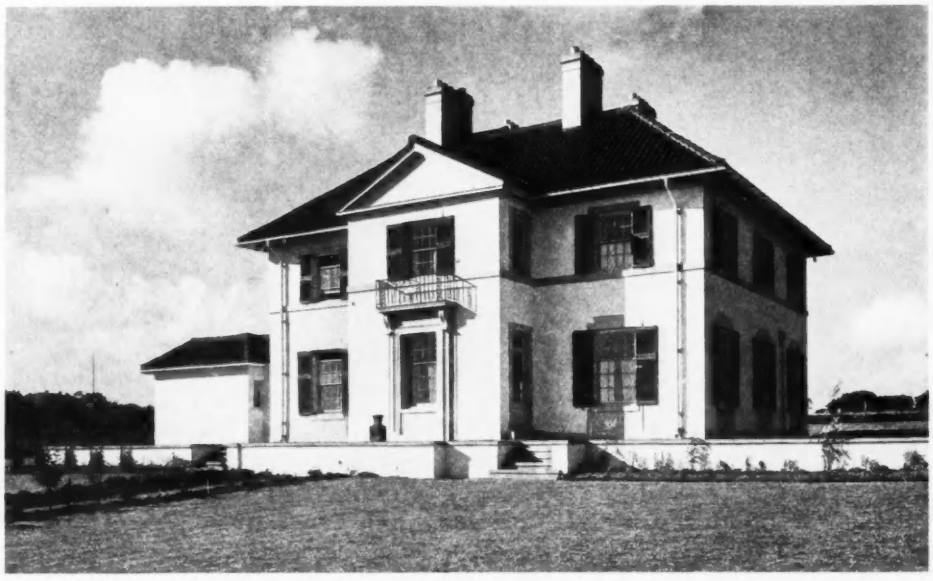
The library; and the entrance hall. The former will contain, as a nucleus, the late Cecil Sharp's rare books on folk music and folk lore, costumes and instruments of traditional dancers and mummers, and copies of all his manuscripts. Both the library and the entrance hall have cork floors, cream-coloured walls, and ceilings painted broken white. The main entrance doors and lobby are in teak, the other woodwork is pine, stained oak colour. The balustrading to the artificial stone staircase is in wrought iron and has a teak handrail.



Cecil Sharp House.] [*By H. M. Fletcher and Godfrey Pinkerton.*

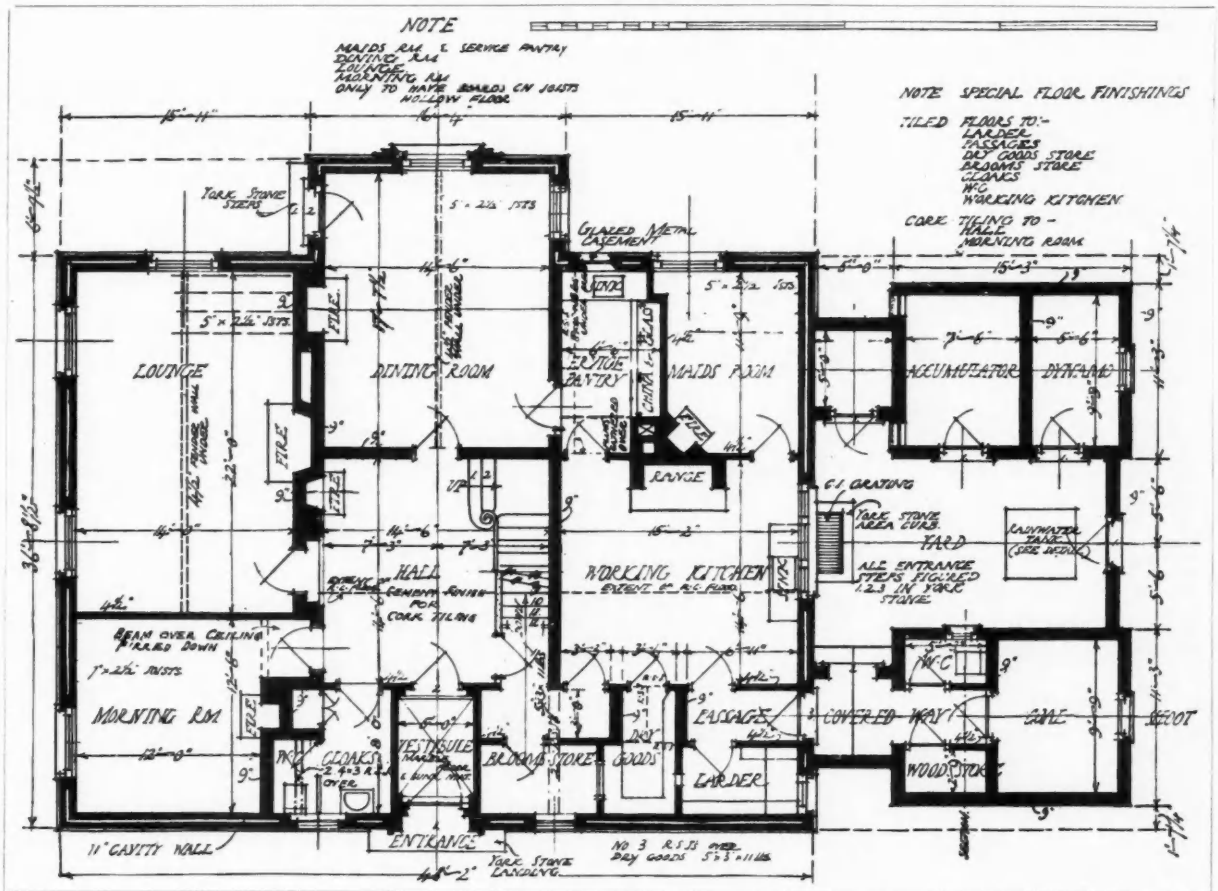
Plans of the layout, the semi-basement and the ground floor. On the first floor is the upper part of the hall, the musicians' gallery, and enquiry, general, and private offices. The semi-basement is ventilated by a special system of ducts, connected to a fan room in the roof.

The garden side. The house has been erected in Gayton, Cheshire, with 11-in. hollow concrete walls. In the centre of the main roof, which is covered with tiles, is a reinforced concrete flat with an asphalt surface, containing top lights above the staircase.



A CONCRETE HOUSE IN CHESHIRE

DESIGNED BY HERBERT J. ROWSE

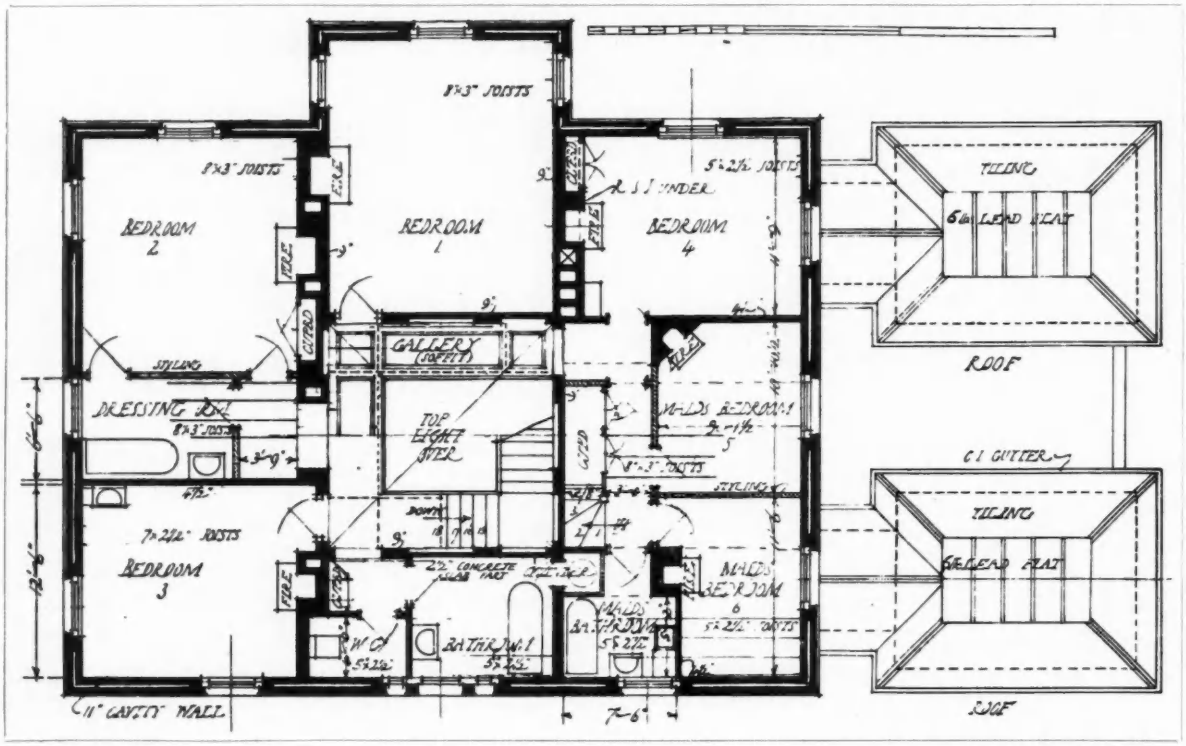


Approximately the left half of the ground floor is occupied by the principal apartments, grouped on two sides of a spacious hall, and the right half by the servants' quarters. A staircase from the hall leads to the wine cellar, with its storage bins, and a store. The first-floor plan is reproduced on the following page.





The front entrance; and the central feature of the garden side. The entrance front is of simple design, the wall being unbroken except for the doorway and five windows, three of which are on the first floor.



House at Gayton.] [*By Herbert J. Rowse.*

On the first floor are six bedrooms, including two for the maids, and in the roof are another servants' bedroom, boxroom, and cistern room. Above the staircase is a coffered ceiling with top light.



ENGLISH PRECEDENT No. 118

BATH STREET, BATH

The colonnaded street is the very heart of Bath. This view is taken with the Cross Bath behind the camera, and looking towards the Pump Room, and includes nothing that is not the direct contribution of eighteenth-century architecture (if we except the lamp standard that obscures the delightful fountain at the end of the street).

Twenty years ago a city council was only just prevented from pulling it down. It was saved by several citizens of taste, and today no council would dare to suggest its removal. Unfortunately, it leads nowhere in particular, so that it cannot prove what a delightful modern shopping arcade it could make.

—[E. MAXWELL FRY.]

LETTERS FROM READERS

R.I.B.A. Building Jury

SIR,—I was interested in Mr. C. Holden's suggestion. First impressions may lead some to consider this an admirable way of dealing with the problem, but I have in mind the experiences related at a London meeting by a well-known American architect. He said that in the early days of their competitions it was decided that this method should be tried in the case of an important building. Each competitor was allowed two votes; the idea being that they would probably give one for their own design and the other for that which they considered the next best. Unfortunately, things did not work out so satisfactorily. What really happened was that each gave one vote to himself, and, to make his position more favourable, "they all with one accord" gave the other vote to the worst design submitted, which was not only selected, but erected!

H. R. GARDNER

Hadrian's Wall Controversy

SIR,—The Council of the Edinburgh Architectural Association (which is at present in communication with the Northern Architectural Association on the matter) has been considering Astragal's reference in your issue of April 30, 1930, deprecating the controversy over the proposed quarrying operations on Hadrian's Wall and bearing the implication that, as there are seventy miles of it, the few miles to be quarried would not matter.

The Council has instructed me to state that this point of view does not accurately represent the facts of the case. Were the Wall of equal merit along the whole of its course exception could not be taken to what Astragal said, but it is really only archæologically and scenically effective for the few miles about Housesteads, and it is upon these few miles that the proposed quarrying operations are to be concentrated.

LESLIE G. THOMSON
For the Secretary, Edinburgh Architectural Association.

Condemned Houses

SIR,—In the leading article in your issue for May 21 with reference to condemned houses and grievances under the Rent Restriction Acts, the various points of view are very fairly put, but I do not think the difficulties are limited to dangerous houses inhabited by protected tenants.

Obviously if the dangerous structure notice involves the whole dwelling, the tenants have got to be ejected whether protected under the Rent Restriction Acts or not. Personally, as a matter of equity, it appears to me that the rehousing of persons who have got to be ejected because of the dangerous condition of the dwelling should be the responsibility of the local authority. Here again it is a question of how far that onus should be put upon the local authority.

Recently, in the Borough of Bermondsey, dangerous structure notices were served in regard to some cottages, and in at least one case the front was taken out. Ultimately the owner was pleased to sell the site to the Borough Council at site value and the Council found accommodation for the tenants and erected two cottages in place of the five unfit cottages. I am afraid that the Council would not regard this as a precedent to be followed in every case.

Where the dangerous structure notice arises through the house being practically worn out, and not through neglect on the part of the owner, and the tenants are persons in humble circumstances, I do not think it would be an unfair thing to place upon the local authority the responsibility of rehousing, subject to the right to acquire the land at site value.

E. GOFF CLARK,
Town Clerk, Borough of Bermondsey.

The Economics of Steel

SIR,—An investigation of the economic aspects of building, particularly of the multiple-story and industrial type, cannot fail to lead to the conclusion that building regulation, to use the term in its widest sense, is thoroughly out of step with modern requirements.

The artificial barriers which restrictive regulations set up, not only to development in the building industry but to industrial recovery generally, are a direct menace to our economic life and are in urgent need of review on a national scale. This need is emphasized by the alarming amount of unemployment in the country and the great possibilities for the relief of unemployment which lie before the building industry if only the economics of the industry can be put on a proper and enlightened footing, so that capital may be attracted to and safely invested in building.

The science of building has now entered upon an entirely new phase through the advent of steel and the absolute certainty of design of steel structures. Moreover science has made vast contributions to building in other directions, notably in precise knowledge of the nature and characteristics of materials in relation to weather and heat and sound insulation.

Progress in building materials has assumed a highly technical character, requiring specialized knowledge which it would be unfair to expect from local authorities. Hitherto regulations have been deplorably static; there is no single industry in the country which suffers from such grave handicaps as the building industry. Instead of one good national standard—if building must be controlled—there are a dozen indifferent ones, with varying degrees of interpretation.

The Lord President of the Council has set up at the Department of Scientific and Industrial Research a committee, with which the British Steelwork Association is closely associated, to investigate the steel structure in all its bearings, and this committee is at present engaged in formulating an interim report on steel-framed buildings. The committee is a very strong one and is sitting under the chairmanship of Sir Clement Hindley. Its personnel is as follows:

D. Anderson, M.INST.C.E.
R. Freeman, M.INST.C.E.
B. L. Hurst, M.INST.C.E., M.I.MECH.E.
Prof. C. Batho, D.SC., A.M.INST.C.E.
Oscar Faber, O.B.E., D.SC., M.INST.C.E.
G. Topham Forrest, F.R.S.E., F.R.I.B.A.
Conrad Gribble, M.INST.C.E.
Prof. C. E. Inglis, O.B.E., M.INST.C.E.
Lt.-Col. J. Mitchell Moncrieff, C.B.E., M.INST.C.E.
Prof. A. J. S. Pippard, M.B.E., D.SC., M.INST.C.E.
Prof. A. M. Robertson, D.SC., M.I.MECH.E.
Prof. R. V. Southwell, F.R.S.
Commander W. R. Gilbert, R.N.
J. H. Humphryes.
J. E. James.
J. D. Stitt.
C. J. Kavanagh, O.B.E.

All the technical aspects of steel-framed building are being investigated and the necessary research work is being carried out at the Building Research Station under the direction of Dr. R. Stradling. The committee will have the widest technical information at its disposal, both in this country and from America and Germany. The Office of the Lord Privy Seal and the Ministry of Health—which has in a very difficult field shown a high sense of public duty—have been kept informed of the work of the committee and have given the British Steelwork Association their support.

The architectural profession can look with confidence to this pioneer work to establish a rational basis for building progress and will undoubtedly give of their best in whole-hearted and sympathetic co-operation to rescue the destinies of building from their present unfortunate position.

C. J. KAVANAGH

The Sketch Club

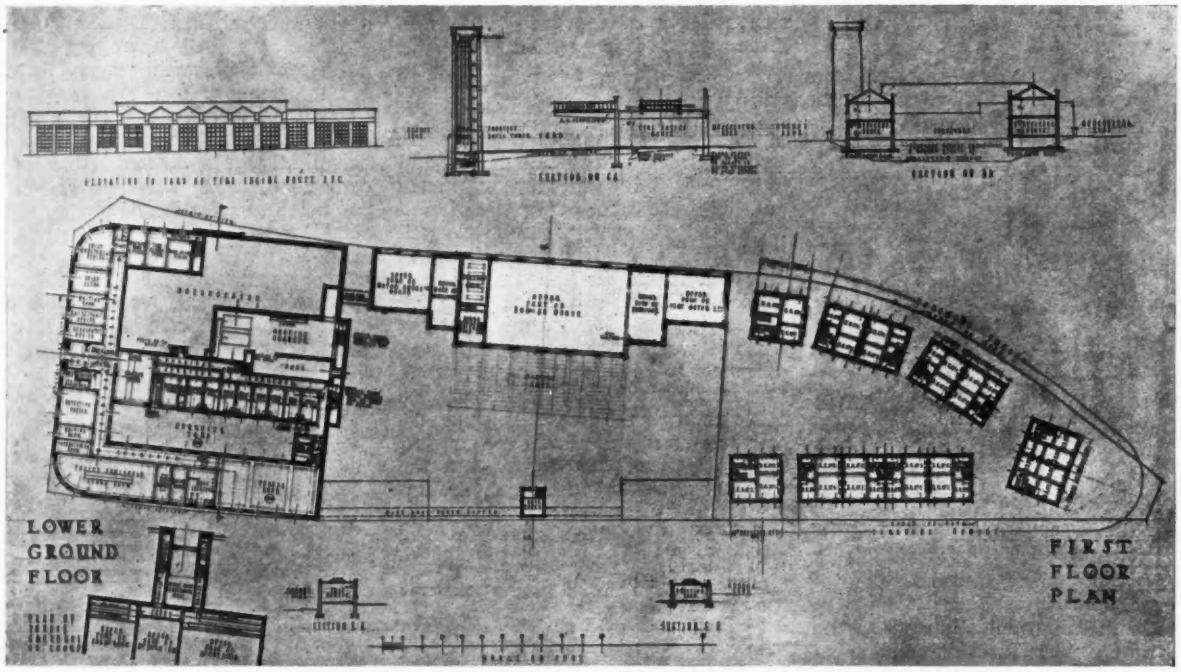
SIR,—I agree with the policy—a very wise one—of "visitors first" in the pages of the Sketch Club. But secretly I shall be glad to return to our own fireside, having bidden the visitors God speed.

All success to the Sketch Club!

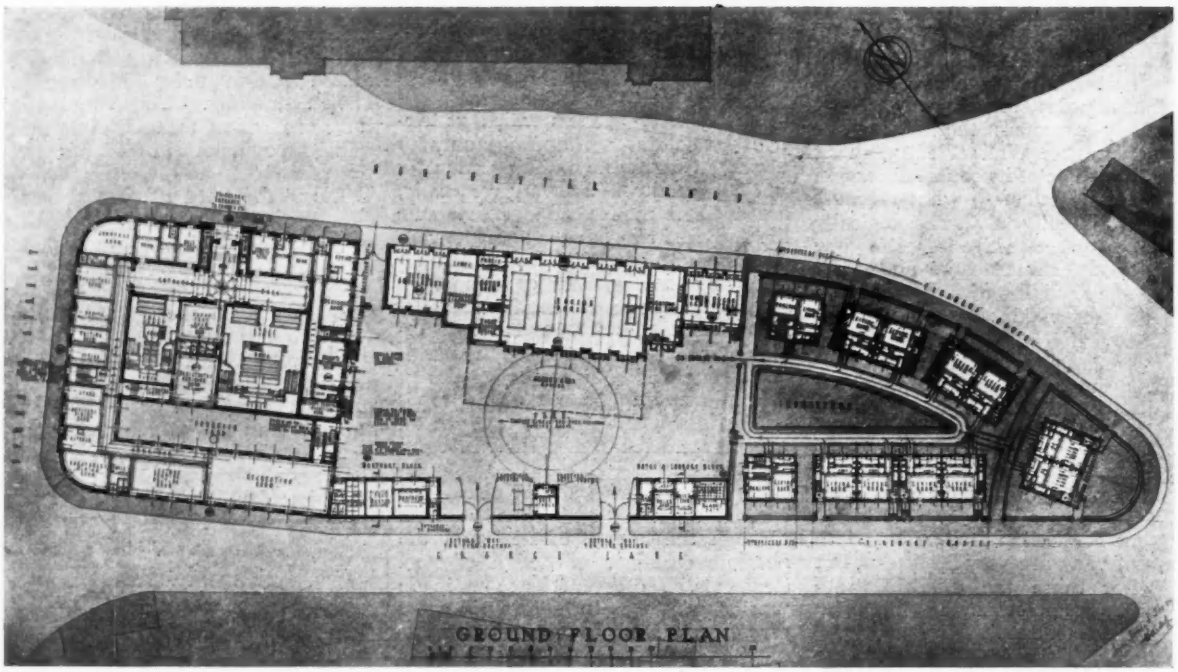
WILFRID QUAYLE.

POLICE AND FIRE STATION: ACCRINGTON

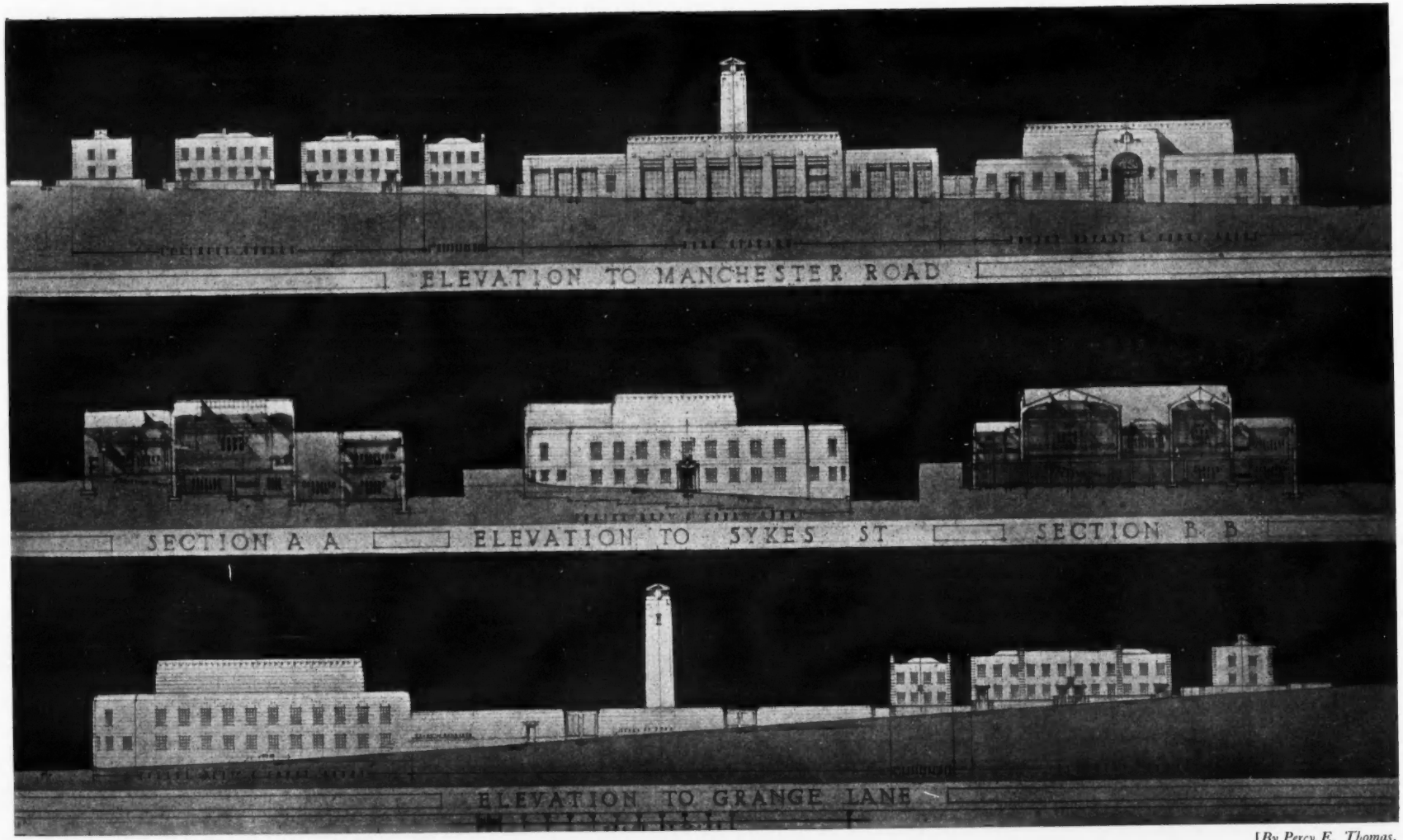
The First Prize Winning Competitor's Designs



The drawings of the lower ground- and first-floor plans of Percy E. Thomas, of Cardiff, placed first, with a premium of £250. The assessor, Herbert J. Rowse, of Liverpool, placed second (premium £150) the designs of Allen and Silcock, of Liverpool; and third (premium £100), J. C. Prestwich and Sons, of Leigh.



The ground-floor plan of the winning design, by Percy E. Thomas. The scheme is to occupy an island site resembling an irregular long rectangle, with one truncated, curved corner. The buildings fall into three groups—on the left, the police departments and court house; in the centre, the fire station proper, with a spacious yard, in the corners of which are a mortuary and kennels, opposed to a bath and lavatory block; and on the right, firemen's residential quarters, surrounding an open courtyard.



Police and Fire Station, Accrington : the winning design.] [*By Percy E. Thomas.*

Three elevations and two sections. The elevation to Manchester Road may be regarded as the principal one, its fellow being that to Grange Lane. For ceremonial purposes, however, an entrance from Sykes Street gives access direct to the Court House, and this is, accordingly, given a sedate and distinctive treatment. All aspects are dominated by the tower.

Settling-Up Honeywood : ii

THE DRAINS ARE SUSPECTED

BY KARSHISH

(H. B. CRESWELL)

Sir Leslie Brash—the client—and his family have been in occupation of Honeywood Grange for three weeks, and damp, which seems to be mainly due to condensation, has been complained of.

GRIGBLAY TO SPINLOVE

Dear Sir, 2/3/26.

As proposed to you by Mr. Grigblay, we held off with metalling the entrance drive until the owner had got his furniture in, and our foreman tells us that the heavy lorries have done a lot of damage to the bottoming. Mr. Grigblay looked in yesterday and thinks you ought to see what has been done, as we must make a claim for restoring, and Mr. Grigblay thinks the best thing will be to put a 5-ton roller over the 9-in. pitching and then level up with 4-in. chalk rubble before the 3 ins. of metalling, as the present bottoming is rather light.

Bloggs will be on the site till middle of next week finishing the paths, etc., and clearing up. We have an expert ganger who will look after the road.

Bloggs says there are various little jobs her Ladyship wants done in the house, and we are attending to these. We propose to put these in a separate account.

Yours faithfully,

Heavy motor lorries are a great tax on private roads, which require better foundations than were formerly necessary. Spinlove is once more indebted to Grigblay for warning him to postpone the finishing of the road. It would otherwise have been badly broken up, and the additional layer of rubble was in any case desirable.

It will be noticed that Grigblay says nothing of Spinlove's demand for the Statement of Account. In point of fact, the reason Spinlove wants the account at once is a good reason why Grigblay should wish to hold it back. However exact Spinlove's methods may be—and we have no evidence that they are particularly exact—they will fall far short of the orderly detailed records which are a necessary part of the daily routine of a builder's office, so that Spinlove will have to depend in great part on his memory in determining that certain charges are justified and in fortifying himself to disallow others. If a builder delays rendering his account, the architect will be at a disadvantage in fulfilling his duties as arbiter of what is just and unjust, and be more or less at the builder's mercy. There is also a psychological reason favouring delay in making claims, of which everyone is conscious and which seems to depend upon repugnance to reopening old disputes or returning to forgotten battlefields. When an owner is in bland enjoyment of his accomplished ambition, and his architect immersed in fresh activities (and anxieties), neither has much appetite for renewal of controversy. In addition to this, a builder is obviously in a bad position if he renders his account before he knows what may be required of him in the matter of making good defects ; for if he is to be met by exacting and crochety demands, he will be inclined to reimburse himself by claims for doubtful extras which he otherwise might prefer not to raise ; or if, by some misfortune, he is involved in a demand for costly restitutions that become the cause of an action for damages, he will wish to be free to inflate his account to the full limits that plausibility and legal ingenuity can effect, as an offset to the claim against him. Thus there are good reasons why a builder should delay sending in his account till the time within which he is under contract to make good defects—usually nine months—has expired, or is on the point of expiring ; and this no doubt explains why protracted delay in rendering the final statement of account is common. It must be remembered, however, that a builder does not make out his statement of account until he has brought up to date his prime cost account which shows what the actual cost of material and labour is ; and as some invoices come to hand only months after the materials are delivered, an early rendering of the statement of account would dislocate his organization.

SPINLOVE TO GRIGBLAY

Dear Sir, 3/3/26.

I will go on to the site on Monday and settle what is to be done to complete the entrance road.

I understand that the work Lady Brash has asked you to do relates only to fittings. This, as you proposed, should be rendered in a separate account. You will, of course, let me know if any kind of structural alterations, or decorations, are asked for.

I shall be glad to know when I may expect your statement of account.

Sir Leslie Brash mentions that damp is appearing on the chimney-breasts of the second floor. Will you therefore leave necessary ladders on the site so that I can examine the listings.

Yours faithfully,

Spinlove is wise in directing the builder to make a separate account of the odds and ends of work which are necessary to enable an owner to fit himself and his belongings into the house ; but he will have to see that none of this work is what should properly be included in the contract work of "completing" and of making good defects. Such accounts are otherwise apt to become inflated by a carpenter employed to fix coat-rails or shelving, including in that work time spent unhanging and easing doors.

BRASH TO SPINLOVE

(TELEPHONE MESSAGE)

11.20. 4/3/26.

B. notes you on site Monday. Hopes stay night. White tie. Phone. R.S.P.

Tell him *Yes*. J. S. 4/3.

O.K. R.S.P. 4.10. 4/3.

Spinlove has begun to record and file telephone messages, as he ought to do—though not quite in this manner. We recognize in "R.S.P." his assistant Pintle, whose style, even in these few words, also identifies him. He is an excruciating person and ought to be sacked, unless—as his toleration by Spinlove might suggest—he has on some occasion saved his master's life.

We noticed before that Spinlove had established intimate social relations with the Brashes ; and as Brash is precisely the sort of man who would be well aware of the disadvantage of this intimacy should his architect let him down ; and as he is, besides, somewhat a self-important, unapproachable person, the thing is not exactly what one would expect.

GRIGBLAY TO SPINLOVE

Dear Sir, 4/3/26.

We have not overlooked that you wish our statement as soon as possible, and we will press on with this work, which is in hand. In the meantime we shall be glad to receive a certificate for, say, £3,500 on account. We may remind you that we sent you a rough approximate statement on January 31st, which we think must have escaped your attention.

Yours faithfully,

LADY BRASH TO SPINLOVE

Dear Mr. Spinlove,

It is dreadfully close here, the house always smells stuffy and the drains must be *very* bad for I have tried disinfectants but it only makes it worse instead of better so something will have to be done or I am afraid we shall all be *affected!* There was a *horrid* smell the other day and I am sure it was the scullery sink or something and it might get into the larder though I told them always to keep it shut as tainted food is *not pleasant* and I am *most* particular even the dogs are not allowed to and it is *specially* at night though Leslie will not believe me.

How peaceful after all the stormy weather we have been having !

Thursday. Yours sincerely,

Lady Brash complained of a bad smell on an earlier occasion before the house was finished. That, after some trouble, was found to be the pungent aroma of the new untreated oak, which the lady did not like. Spinlove apparently does not answer this

letter as he was, as we know, going to the house a day or two later.

SPINLOVE TO GRIBLAY

Dear Sirs, 6/3/26.

Yes, I set aside your letter of January 31st, as the work was then not completed and you were not entitled to a certificate; and the matter has since escaped my attention, and the statement covered by your letter cannot be found in this office. I am at a loss to understand how you justify a certificate for £3,500, and shall be glad if you will let me have a copy of the missing statement.

Yours faithfully,

A lame business. Spinlove seems to have put aside the statement without looking at it.

SPINLOVE TO GRIGBLAY

Dear Sirs, 9/3/26.

I enclose specification for work in completing entrance road. I ought to have your estimate of the extra cost, as Sir Leslie wants to know this.

I am annoyed to find that wet gets into the chimneys and shows on the second-floor breasts. I could see nothing wrong with the listings, and Bloggs assures me the soakers were properly lapped and turned up—in fact, I saw the work being done. It is, therefore, evident that the water strikes through the cement and runs down behind the upturned edge of the soakers, and I learn from Bloggs that the cement was *not* waterproofed with Puddlyte. The listings will have to be replaced in Puddlyte cement as specified. The work should be put in hand at once, a small bit at a time, as weather allows, and care taken to keep tarpaulins rigged to prevent rain getting in.

Lady Brash tells me she finds the house "stuffy," and that she has not felt well since she went to live in it, and that two of the servants have been unwell and she suspects something is wrong with the drains. This is not possible, but, as a fact, did the District Surveyor test the whole of the drains and give you formal certificate of acceptance of the sanitary work? If so, kindly send me the certificate by return.

Yours faithfully,

It seems that Spinlove used lead soakers laid in with the tiles and turned up against the brickwork where roof slopes butt up against chimneys, but replaced the usual lead cover-flashings, turned into the brick joints and covering the up-turned edges of the soakers, with cement fillets filling the angle between tiles and chimney-face. These "listings" are a perfectly sound, water-tight device; although they are associated with the tradition of humble buildings rather than important works of architecture. Spinlove, we remember, had several knowing ideas for a sham mediæval roof which he could not get carried out, but he seems to have had his own way with this one.

The Local Government Board model bye-laws secure that all drains shall be planned on established scientific principles of sanitation, and architects are, therefore, relieved of the preoccupation of trying to save money by following ideas of their own; and inspections and tests by District Councils' Surveyors reduce—in practice though not in law—the architect's responsibility for seeing that the work is properly carried out. Spinlove's letter suggests that he is in need of evidence of this official approval to enforce the assurances he offered Lady Brash of the soundness of the drains. Spinlove's urgency will be readily understood by those who read the earlier letters. If Lady Brash gets the idea into her head that something is wrong with the drains, nothing but a course of hypodermic injections is likely ever to get it out again.

GRIBLAY TO SPINLOVE

Dear Sir, 10/3/26.

The whole of the drains were duly tested with water and the pipes with smoke by Mr. Gallop, the drain Inspector, and the whole were inspected on two occasions by the District Surveyor, Mr. Potch, whose certificate of approval we enclose. We are sure there is nothing wrong, as the work was done under the supervision of Bloggs; and as Mr. Potch could not find fault with it no one else is likely to be able to. [*This letter was evidently dictated by Grigblay.*]

As regards the listings, this is not, in our opinion, the best method of flashing to chimneys, but we have no reason to think that the work at Honeywood is defective, as it was carefully carried out to your instructions. We have respectfully to point out that Puddlyte to listings was not, as you state, ordered by you. Puddlyte cement is specified for bedding and jointing to weathered brick members, only.

We do not know to what the damp in chimney-breasts is due, but Mr. Grigblay expects to be that way on Friday and will take the opportunity.

We have noted your provisional acceptance by telephone today of our estimate of £64 12s. for remaking entrance road. We have ordered the pitching and enclose details of our measurements and rates on which our estimate is based.

Yours faithfully,

Spinlove is making a muddle of things. He ought to have asked the Quantity Surveyor what the approximate value of the work on entrance road was, and left it to be measured and valued at settling-up. Apparently he accepted Grigblay's estimate so that the work could be put in hand, but subject to measurements being checked and rates agreeing with the Contract Schedule. Now this is a task for the Quantity Surveyor, and in any case Spinlove had no business to learn what those rates are, for the priced bills of quantities, which constitute the Contract Schedule, are properly kept under seal. A builder has a right to expect that they will be so kept, as otherwise the architect is in a position to vary the contract in the interests of his client, and unprofitably for the builder, by substituting work for which the builder has included a low price for that for which he has allowed a good one. Such a proceeding by a building-owner is manifestly unfair and, by an architect, definitely dishonest, for the architect is, by the terms of the contract, constituted arbiter between client and builder.

It is not usual for the District Sanitary Inspector to test with smoke, but he has the right to do so, and there were reasons why Mr. Potch, the District Surveyor, should instruct him to so test at Honeywood.

SPINLOVE TO LADY BRASH

Dear Lady Brash, 11/3/26.

As promised, I enclose the formal official certificate of the Local District Surveyor showing that the whole of the drains conform with the regulations of the Local Government Board and Public Health Acts; and that the pipes, both below and above ground, have been subjected to smoke and water tests; and that the whole of the work was approved as sound and to his satisfaction. I hope that this will entirely banish any doubts you may have. May I assure you that I have none whatever myself. As I told you, I personally overlooked the whole of the arrangements, and you may rest assured that everything is safe and sound. Even if a defect had developed in the drains since they were tested and passed, which is unbelievable, it could not by the remotest possibility lead, as you imagine, to contamination of the air in the house.

With kind regards,

Yours sincerely,

PS.—Will you please return the certificate when you have done with it?

Here we see our young friend making his old mistakes. In his anxiety to emphasize his assurances, he represents sanitary security as a very difficult and dangerous matter to arrange and a still more difficult matter to prove—which are the particular things he should have avoided. He also depicts himself as persuaded, only, of the purity of Honeywood: he does not, as he should, assert a fact, but reasons his conclusions, although he knows that the person he addresses is incapable of reasoning and unable to weigh the evidence if she were. On the top of all this he actually admits the possibility of a defect and, without knowing what that defect may be, pledges his word that it cannot set up insanitary conditions. It would probably have been better if he had left Brash to open the subject, as he would certainly do were it more than a figment of his lady's imagination; but Spinlove should certainly have addressed himself to his client

and not to Lady Brash, and in either case he might well have confined himself to sending the certificate without comment. Why the exasperating fellow cannot hold his tongue, after all he has suffered from unnecessarily wagging it, is beyond understanding. It is inconceivable that there is anything wrong with the drains, but Spinlove has given his client reason to think there may be.

GRIGBLAY TO SPINLOVE (PRIVATE)

Sir, 12/3/26.

I looked in at Honeywood when I was passing today. You can take it from me that there is nothing wrong with the listings and, if there were, they would not let water into the flues to run down and lie in puddles on the back hearths of fireplaces as it has been doing. There had rightly ought to bea dampcourse across the chimney, and flue pipes in the stacks; for the rain drives across from the S.W. something cruel, and the proper thing to live in up at Honeywood is a submarine, but we can make all right with a bit of soap. The house is dry, but the water drives right through the 9 inch, that's certain, for the wall at the bottom of the hollow is soaked; but nothing is showing inside, though the maids were quack-quacking about a bit of sweating there is which is only what you must expect in a new house. [*"Sweating" is here loosely and inexactly used by Grigblay to signify condensation.*]

The matter I am taking the liberty to write to you privately about is this New Novelty Super Paint the old gentleman insisted I use and which is going to be a bit more of a novelty than he bargained for. The ripple is much more than it was and is forming in ridges. Sir Leslie may think it looks pretty so, but he will change his mind when it begins to fold over on itself and break away in flakes—which is what comes next, for I found a place behind a radiator in the bathroom where it is doing a bit of private rehearsal. The worst place is on the wall of the kitchen where the furnace flue goes up behind. The maids have brushed it over and washed it down till there isn't any paint left, scarcely.

As you know, sir, I refused to take responsibility for Riddoppo and gave warning before the painters left the job that it would all have to come off again —except what came off of itself—and I hope you will bear it in mind, because when Riddoppo gets a move on and shows how super it knows how to be (and we shan't be long now), the dogs will begin to bark; and as I don't want to be bit, and you, I take it, don't want either, and as I have perhaps had a little more experience of mix-ups of this kind than has happened to come your way, I take the liberty, with all respect to your superior judgment, of dropping you a friendly hint—and it is just to take no kind of notice, and if the old gentleman says anything or makes any complaint, to hold out that the paint is no concern of yours any more than it is mine, for I understand you objected to Riddoppo and only carried out instructions in passing on Sir Leslie's orders to me. Please be very careful, sir, what letters you write to Sir Leslie, and don't write any if avoidable, for lawyers are wonderful fellows at proving words mean the opposite to what they say.

I hope no harm done by me addressing you, but thought best, as I am afraid there is trouble ahead.

I am, sir,

Yours faithfully,

For a builder to write such a letter to an architect is most unusual, although the understanding established between Grigblay —a builder ripe in years and experience—and Spinlove—an architect mature in neither—would render it easy for Grigblay to make the same communication in conversation; for Grigblay's individuality is masterful, and Spinlove, although he has great tenacity and can show spirit on occasion, impresses us as lacking personal force. Grigblay has, however, formed the habit of dissipating the evening preoccupations of his active mind in well-purposed letters to Spinlove which, though intimate and fatherly in tone, are perfectly respectful—and that is all there is to say about it. It is necessary to call attention to the oddness of the circumstance, or an experience few architects are ever likely to have might be supposed usual.

The meaning of the letter is that Grigblay, in visiting the house, is reminded of the imminent failure of the inside paint work, and he is uneasy. Apparently he feels that his disclaimer, and Brash's acceptance, of responsibility for Riddoppo, does not exactly secure him; and he is afraid that Spinlove may be led, by characteristic exuberances, to countenance an interpretation of the facts prejudicial to Grigblay's position. Spinlove, of course, cannot by anything he may write or say commit Grigblay; but he may readily mislead Brash as to what Grigblay's obligations are, and thus foment contest.

[NEXT WEEK: III—THE STATEMENT OF ACCOUNT.]

QUESTIONS THAT ARISE

Tasmanian Oak

"Experiment" writes: "*I have been recommended to lay a floor to a large hall in Tasmanian oak blocks, and I should, therefore, like to know the qualities of this wood, and whether it is considered satisfactory for flooring of this type.*"

Tasmanian oak is not a true oak, and it bears a resemblance to English ash, especially when first cut.

It is a wood that is easily worked, straight grained, of close texture, strong and elastic. It is very useful where required for bending, and also the colour tones down to various grades of plain oak.

I have found it satisfactory for various floors I have had laid suitable for quite hard wear, and have found that it takes a good polish. It could be used with safety for the floor of a large hall.

J. A. G.

Expenses and Tax

"Architect" writes: "*May I claim relief from income tax for expenses incurred in entertaining my clients?*"

Although entertaining expenses appear to be a troublesome item when computing profits for the purposes of income tax, they should be easily dealt with if only proper records are kept of them and put through the books in the same manner as any other expenses are recorded.

In large companies where entertaining expenses are incurred, the managers and other heads of departments are obviously reimbursed for such expenditure, and it therefore must be put on record in the books; but in the case of one-man businesses and professions, such as an architect's, the matter is different.

For instance, many professional men in the course of their daily routine have, for business or professional purposes, to entertain customers or clients, and they usually pay for such expenses out of their personal cash and forget to make any record of them.

When the accounts are reviewed for income-tax purposes, inspectors are always wary of expenses claimed beyond accounting records, that is to say, the taxpayer says: "But I have never charged anything for entertaining expenses, and I ought at least to have an allowance, say, of £50."

It is therefore absolutely necessary to treat this item on exactly the same lines as any other expenses and make out a proper voucher for the amount incurred with reasonable details thereof, which should be signed and dated and filed with the usual receipts.

The general practice is that all reasonable expenses of entertaining are allowed for income-tax purposes, and if they are surcharged by the Inland Revenue Authorities an appeal should be entered forthwith and fought out; but provided records and proper explanations are forthcoming (if required) there should be no trouble in having this item treated as a charge.

Many companies and firms do not

even show this item separately, but include it under headings such as "General Expenses," "Business Expenses," "Trade Expenses," etc.; but to my mind this is apparently not necessary. Why not make a clear item of this expense and stick to your figure?

M. L. H.

R.I.B.A. Contract Form

J. C. T. writes: "*I recently obtained tenders from ⅛-in. scale plan and specification only for a small house, the lowest tender of £850 being accepted, under the usual R.I.B.A. contract form (October 1909 edition). The first and third clauses in the specification read as follows: 'The tender to be in one lump sum and must include for all labour and materials necessary to complete the buildings in each trade in the usual manner, and for complying with bye-laws, even if not specially mentioned in the specification. The general quality of the labour, materials and finish must be such as is usual in a house of this class, i.e. distinctly better than cottage work, but not equal to work usually put in a much larger building.' The building is now roofed in, and it has been found that the specification does not mention either skirtings, door architraves, or picture moulds. I claim that these are all the 'usual finish' and must be included in the contract sum. The builder claims they are 'extra.' The picture moulds are shown clearly on the ⅛-in. scale section.*"

The question is one of fact. The answer depends on what is understood in the profession by the expression "in the usual finish" in relation to the facts before me.

I am not competent to express an opinion as to whether it is a custom in the profession that the items specified in the question should have been included, or whether they come under the heading of "extras," to be paid for accordingly.

Trade custom is a matter of fact and must be proved by evidence by those who allege it, unless the custom has been recognized judicially. The onus of proof rests on the party alleging the trade custom, and provided it is not unreasonable or contrary to the general law, the courts will recognize it and will enforce it.

With regard to the picture moulds, different considerations apply, as they are shown clearly on the scale section.

Subject to any express stipulation in the contract to the contrary, the basis of the contract is the plans and specification.

Whilst the items other than the picture moulds are conspicuous by their absence, and it is a question of trade custom whether one is entitled to read into the contract an unwritten clause that they should be included in and form part of the plans or specification, yet, in the case of the picture moulds they are provided for expressly, so that they form part of the plans.

In my view, in the absence of any trade custom to the contrary, *prima facie* the picture moulds are included in the contract, so that the builders who allege they are extras according to trade custom must prove their allegations; with regard to the other items, the onus of proof, in my opinion, is on the architect.

E. F. I.

Charcoal Box

D B. writes: "*Can you give me any information about a charcoal box for absorbing the smell from the filter bed of a septic tank installation for a house occupied by six persons? State size and construction and what sort of charcoal, whether it should be in a wire tray for replacement, how long will it be effective in absorbing the smell, and whether it will regain the power of absorption if it is exposed for a time to the fresh air. It is proposed to insert it in the pipe connecting the filter bed with the ventilation pipe.*"

The application of charcoal for the purpose of deodorizing offensive matter has long been practised. Charcoal is a very porous substance, to which it owes its properties as a purifying agent. When freshly burned it will absorb about ten times its own volume of oxygen and even greater quantities of other gases. A cubic foot of charcoal is capable of condensing in its pores about 100 cubic feet of ammonia and 50 cubic feet of sulphuretted hydrogen, both of which gases are among the offensive products of the putrefaction of organic substances. This power of absorption is not confined to gases, moisture being also imbibed.

With this combination, the offensive gases, all of which are capable of undergoing oxidation, are acted upon chemically by the oxygen and converted into inodorous products such as sulphuric acid.

The hard varieties of charcoal concentrate the greater volumes of gas and of the vegetable charcoals; that prepared from coconut shells is the most absorbent, while animal charcoal, which is prepared by charring the bones of animals, has still greater absorbing properties. Its efficiency is proportional to the amount of surface exposed, and it should therefore be used in a coarse granular state. The efficiency is gradually impaired by use, but is again restored by reburning.

Although, as will be gathered from the above remarks, charcoal has much to recommend it as a deodorizing agent, it has been found in practice that in a moist situation it is liable to become so caked and consolidated that it will neither allow the gases to filter through nor absorb the impurities contained in them.

For use in connection with a small septic tank the charcoal, about six inches in depth, should be contained in a wire tray about twelve inches square and placed in such a position that the whole of the gases emanating from the tank may pass through before escaping by the vent-pipe into the atmosphere.

As there should be no current of air through a septic tank, the vent-pipe acting more as a safety valve than a ventilator, in preventing any undue pressure of gas in the tank, the quantity passing through would be comparatively small, and it is considered that the deodorizer would not require attention more than twice or three times in a year.

N. H.

Grained Woodwork

G. writes: "*The woodwork to the drawing-room of a house I am redecorating is grained and varnished a light oak colour. My client has taken a dislike to the light colour, but would like the graining, which is well executed, to remain. He suggests that the woodwork might be darkened, and still retain the graining. Can this be done?*"

In reply to your correspondent I would suggest that the work could be overgrained as follows: Well rub down and apply a coat composed of burnt sienna and burnt turkey umber in equal proportions, thinned with linseed oil and turpentine also in equal proportions, with the addition of a good liquid drier, and finish with one coat copal varnish.

D. E. C.

Fixtures to Partitions

"Harassed" writes: "*In my offices I have had considerable trouble with different fixtures, such as fire appliances, hat and coat racks, etc., which are fixed to partitions by means of screwing to wood plugs. These have all become loose, and several have fallen away from the partitions. A jobbing builder told me that they were fixed with inferior plugs, but, after he had fixed, as he called them, to stouter plugs, the whole became loose again within a few weeks. I understand that the partitions are solidly built of terra-cotta blocks. Can you inform me whether these fixtures are usually secured in the above manner to this type of partition? If not, in what manner is this work done?*"

Hollow, terra-cotta block partitions do not provide a satisfactory grip for plugs, and probably the various fixtures are secured by little else than the plaster.

If it is inconvenient to transfer the fixtures against brick walling, where wood plugs could be used, I consider that the only satisfactory way would be to secure the fixtures with bolts through the partitions.

W. A. D.

A NOTE ON PROPORTION

IT is very desirable to know what is meant by good proportion. There are many dogmatic statements in existence, but it is very rare for any author to tell us how to get good results in a practical way.

Sir Theodore Cook wrote: "Everything in Nature is capable of mathematical expression if the conditions are only sufficiently well known"; Owen Jones, a deep student and practical designer of the beautiful: "Compositions in equal lines or dimensions are less beautiful than those which require a higher mental effort to appreciate them"; Viollet-le-Duc: "It is not enough to fix on dimensions differing in height and width according to mere caprice; it is necessary that these dissimilarities should proceed from a general principle, and it is in this respect that the determination of proportion by triangles is advantageous."

Now here is a method of procedure that can be practically used with a set-square.

Take the 60 deg./30 deg. set-square, and to ½ in. scale set out a door opening 5 ft. wide; this gives a tangent of 8 ft. 8 in. (A). Then use the set-square flatwise to get a panel above door. This set-square can be used in many ways to get other proportions; in this case I will only use it to divide into one and three for the architraves and one and two in the cornice. Apply the set-square (see 1 in. scale details of A) to the width of opening to get widths of architrave three to one; to divide architrave into two parts in the proportion of three to one; to divide outer part of architrave into three to one and the remainder into three to one; and then to divide the smaller part of architrave into three to one. Run these divisions round the door opening.

Further correspondence will be got if the whole composition is in the same ratio as the opening. This will require a little additional height, which gives a pleasing cornice. In the cornice, for variety, I use the one to two division, but return to the one to three division for fillet to cyma and hollow of bed-mould; some simple design in the panel above door completes the composition. It is particularly rhythmic, but the divisions of line are one to two and one to three, both extremely commonplace, and they do not in the least carry out Owen Jones's valuable hint, so I go through the same process with the golden cut set-square and get a design (B) just as rhythmic but far more subtle in its ratios.

There are certain standards of proportion specially pertaining to the various animal and vegetable forms, the whole range of creation generally; man, elephant, horse, hound, bird, butterfly will have an ideal form, and each member will be an approach to this ideal, i.e. will have an individuality.

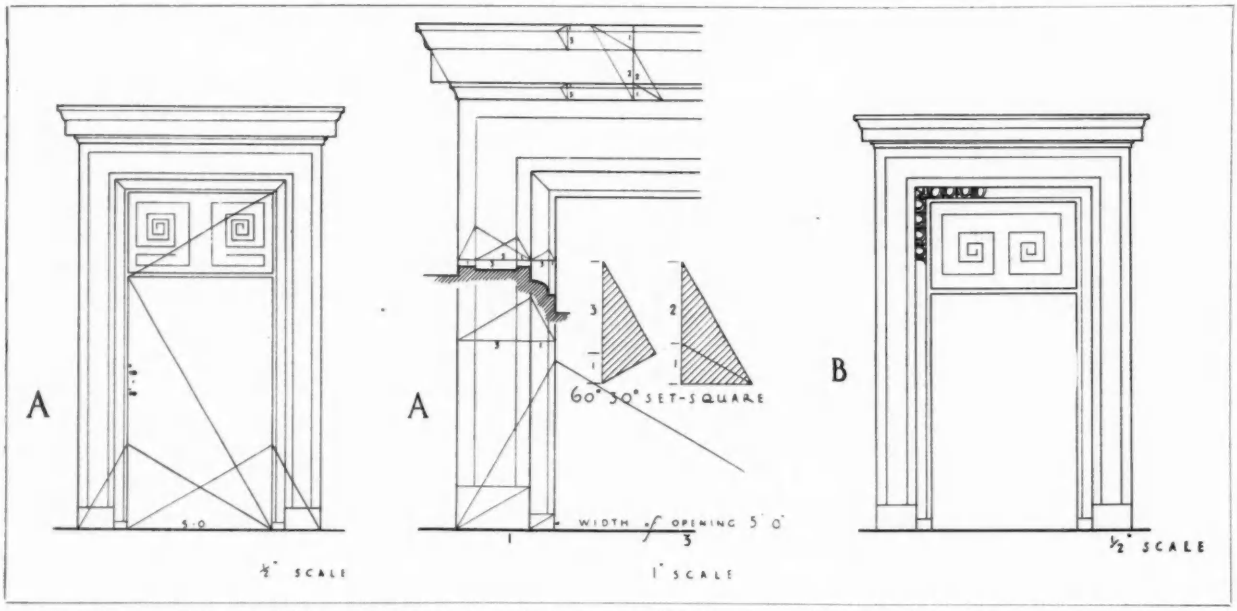
The ratio of the human head to the rest of the figure is generally accepted as one seventh-and-a-half part, and deviations so slight as one-eighth or one-seventh make the head too small and too large.

In a similar way we accept those proportions in architecture which were considered beautiful in ancient times, and while we aim at new combinations we yet reverence old traditions, but we know that, as Viollet-le-Duc says: "The utter decay of official instruction and the loss of the traditions have allowed the clue with which the professional guilds were so familiar to slip from our hands." And only those who have plenty of time for systematic study of a subject can reasonably expect to arrive at any advance. Knowledge comes very slowly. As a well-known illustration, our present knowledge of the Parthenon dates back less than 100 years.

From 1750 to 1755 Stuart and Revett were measuring in Greece. Their first volume was published in 1767, and we had the Greek revival in architecture. This revival had practically died out before the discoveries of the Greek refinements.

In 1810 Cockrell discovered the Greek entasis. In 1829 Donaldson established the inclination of the columns. In 1837 Pennethorne discovered the curvatures, having four years before discovered the curves at Thebes; he had been to Athens in 1833, again in 1835, and returned the third time in 1837, before he discovered the curvature of Greek architecture.

In 1838 Hoffer and Schaubert, German architects, also discovered the curvature. In 1851 Penrose gave his most careful measurements. In 1866 Pennethorne published his discoveries.



These three drawings, which illustrate the points made in the above article, have been reduced from ½-in. and 1-in. scales respectively.

LAW REPORTS

IMPROVEMENT SCHEME : POWERS OF THE MINISTER OF HEALTH

Rex v. *The Minister of Health. Ex parte Yaffe. Court of Appeal. Before Lords Justices Scrutton, Greer and Slesser*

THIS was an appeal by Mr. Abraham Yaffe, an estate agent and property owner of Liverpool, from the judgment of a King's Bench Divisional Court, composed of the Lord Chief Justice and Justices Swift and Talbot (Mr. Justice Swift dissenting), discharging a rule nisi for certiorari which had been granted on March 26, 1929, at the instance of Mr. Yaffe, calling upon the Minister of Health and the Liverpool Corporation to show cause why an order of the Minister of November 23, 1928, confirming an improvement scheme known as the Liverpool, Queen Anne Street, Improvement Scheme, 1928, should not be quashed.

The point raised in the case was whether the confirmation of a scheme —good or bad—by the Minister of Health gave it statutory effect and prevented the Court inquiring into it.

The contention of Mr. Yaffe was that the Minister had no jurisdiction to make the order for the reason that the scheme was not for the erection of houses for the working classes and was not an improvement scheme within Part 2 of the Housing Act, 1925, because it contained no concrete proposals for the development of the land within the Queen Anne Street area after acquisition by the Liverpool Corporation. Mr. Yaffe further contended that the scheme did not provide for the rearrangement or reconstruction of any of the streets or houses in the area, and he also objected to the scheme on various other grounds.

The majority decision of the King's Bench Divisional Court was that where the Minister had made an order bona fide intended and purporting to be made under section 40, subsection 5, of the Housing Act, 1925, confirming an improvement or reconstruction of any of the streets or houses in the area, no question of ultra vires could be raised in a court of law.

The Court discharged the rule and Mr. Yaffe now appealed.

The Court, after long legal arguments, allowed the appeal.

Lord Justice Scrutton, in the course of his judgment, said that under the decision in the Derby case a scheme must, in order to be within the Act, include maps and particulars, showing not only the land to be cleared, but proposals for its use when cleared. When a scheme did not comply with those essential conditions, the local authority and the Minister could be prohibited from proceeding with it. In the present case the scheme did not comply with the provisions of the Act, and before the order was made the Liverpool Corporation or the Minister could be prohibited from proceeding with it, and he hoped that local authorities and the Minister would comply with the view of the Courts as to the limitation of their powers under existing Acts. The order made by the Minister here did not sanction any particular plan of reconstruction. The present Act enabled the Minister to take away the property of individuals without compensation upon certain conditions, but in that case those conditions must be complied with. Only the clearest words could give final validity to an order made without compliance with the conditions. Here there were no such words. The Attorney-General had argued that once an order was made it had statutory effect even if it violated all the statutory conditions. With that he could not agree.

His lordship declined, without clear words or authorities clearly binding, to hold that when Parliament delegated to the Minister the authority to deprive citizens of property without compensation on certain conditions, Parliament had allowed him to make such an order without complying with those conditions, so that his order should have the effect of unquestionable law. The writ of certiorari should go to the Minister of Health to bring up the order in question to be quashed as in excess of jurisdiction. The order of the Divisional Court should be set aside and the Minister ordered to pay the costs of the applicant there and below. The Corporation of Liverpool should have no costs from any body, as they were a proximate cause of the error.

In this case it was very desirable that the highest tribunal should express an opinion on the legal position. But as a matter of constitutional importance he hoped that Members of Parliament and Ministers and Parliamentary draftsmen would consider whether that form of legislation was really satisfactory. It might be convenient to Ministers not to have to consider carefully whether the powers which they were purporting to exercise were within their statutory authority and the powers delegated to them by statute. Parliamentary draftsmen might have got in the habit of inserting that kind of Star Chamber clauses either on the instructions of the Minister or, as a matter of habit, without his instructions. Members of Parliament might not trouble to consider what the sections to which they were giving legislative authority really meant, but simply follow the authority of the Minister and the Government Whip. But he could not think it desirable that when Parliament delegated authority to affect property and persons only if certain statutory conditions were observed, it should then pass clauses which, it might be contended, allowed those delegates to contravene those conditions and make ultra vires orders which could not be controlled by the Courts which had to administer the laws of the land.

Lords Justices Greer and Slesser concurred.

ALLEGED WAIVER OF BREACHES

Morgan-Jones v. *Wilson. King's Bench Divisional Court. Before Justices Talbot and Finlay*

THIS was an appeal by the defendant from a judgment of Deputy Judge Mullens, sitting at the Marylebone County Court, in favour of Miss T. Morgan-Jones, from whom he had rented a service flat at Westbourne Terrace, Paddington, under an agreement of July 9, 1929.

The county court judge, having heard the evidence that there had been a failure to implement the obligation to provide hot water and central heating from October 3 to October 28 and on November 4 and 5, held that there had been a serious breach by the plaintiff of the agreement, but that the payment of rent on October 10 constituted such a waiver by the defendant of the breach that he was not entitled to rely upon it, and that there could not be a termination of the tenancy. He found for the plaintiff for £54, and for the defendant for £5 damages for breach of contract by the plaintiff.

For the defendant, it was argued that the rent paid on October 10 amounted in law to a waiver.

Mr. Justice Talbot, in his judgment, said the only waiver which the county court judge appeared to have considered was one affected by the payment of rent. It was now known that the payment was made on September 27 and that the judge was not to blame for taking the payment as on October 10. It was impossible to hold that the payment on September 27 could operate as a waiver of breaches which began early in October, and even if the date of payment was to be treated as October 10, there was the further difficulty that the breaches manifestly continued after that date. The judge had misdirected himself as to the effect of the facts he had found. Under these circumstances, he should have entered judgment for the defendant. The appeal would be allowed with costs.

Mr. Justice Finlay concurred.

THE SKETCH CLUB

FOURTH SESSION

THE name Ragusa itself inspires a feeling of romance, and it would indeed be difficult to find another spot so small in area that is so full of romantic picturesqueness. Everything contributes to it—the natural surroundings, the people, costume and architecture—each in their own way the essence of beauty.

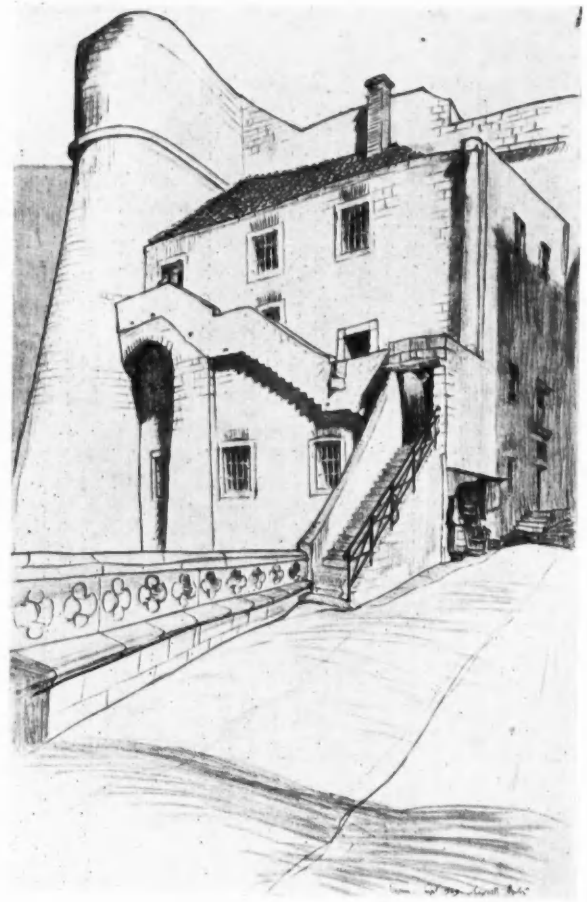
The city is built on the side of the steep hills rising from the Adriatic and is surrounded completely by magnificent fortifications which climb and descend the steep inclines in an almost incredible manner. At the west end of the city Fort Lorenzo stands out in the sea against the skyline as a great sentinel. Dominating the city, it is the sole building on a promontory of rock some 300 ft. high, the whole of the top of which it covers, the walls rising directly off sheer precipices of rock to the south-east and west. It is impossible to imagine a building more perfectly in harmony with its site, nor can it have been any less perfect in its time for the purposes for which it was built.

There are only two gateways into Ragusa (or Dubrovnic, as it is now called), one at the west and one at the east. The latter, known as the Ploca, leads over a bridge spanning a deep inlet from the port. Against the inner walls of the fortifications has been built later a guard-house, with a delightful external stairway leading to the different apartments.

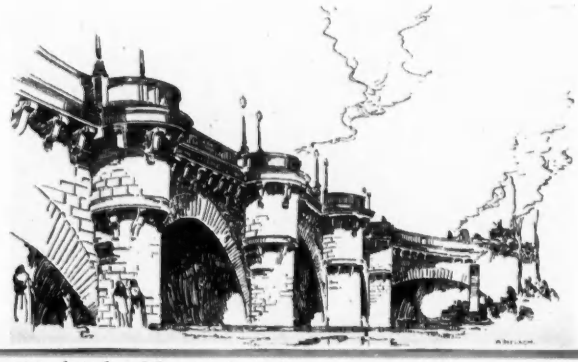
The entire town is built of a warm yellow stone, its tile roofs every shade of peach colour. M A



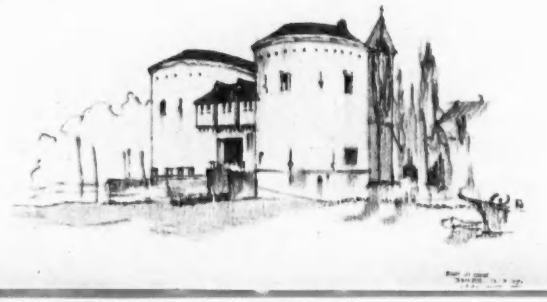
Fort Lorenzo, Ragusa (Dubrovnic), Dalmatia.
(Pencil and tinted crayon)
By Maxwell Ayrton.



The Ploca, Ragusa (Dubrovnic), Dalmatia.
(Pencil and tinted crayon)
By Maxwell Ayrton.



The Pont Neuf, Paris, France.
(Pen and ink)
By Alan Reiach.



The Porte Ste. Croix, Bruges, Belgium.
(Pencil and tinted crayon)
By L. F. Bullivant.

THE bridge has ever been associated with man's endeavour and achievement. At first an adventure, the art of bridge building today is no

THE Ghent Canal skirts the whole of the eastern side of the town of Bruges, from the Minne Water Bridge,

France.
(Pen and ink)
By Alan Reiach.

Belgium.
(Pencil and tinted crayon)
By L. F. Bullivant.

THE bridge has ever been associated with man's endeavour and achievement. At first an adventure, the art of bridge building today is no more than an exact science, at best a collaboration between architect and engineer.

Built in 1578, this graceful bridge, curiously enough, the oldest of all Paris bridges, despite its name, compels one's admiration, if only for the ease with which it takes its place in its surroundings. The solidity, the easy swing, go to make this achievement extraordinarily satisfying, and quite one of the most lovely things that Paris has to show. A. R.

ON the hill, high above the sea, at Abbotsbury, stands St. Catherine's Chapel, with its fine barrel-vaulted roof, and in the little village below the fifteenth-century monastic barn "grows" out of the ground. It is of an ecclesiastical appearance, which is heightened by lancet windows and heavy buttresses.

A little stream feeds the fish-pond in front, which reflects this expression of the life and work of the builders. F. M. C.



The Tithe Barn, Abbotsbury, Dorset.
(Red pastel.)
By F. M. Coombs.



In the rue Malpalu, Rouen, France.
(Pencil.)
By Alan Reiach.

WHAT greater delight is there for the true sketcher than that of exploring old streets, fallen into disrepair perhaps, full of curious dwellings, and indescribable smells—of ferreting about old gabled houses, or of looking for the beautiful in the mean?

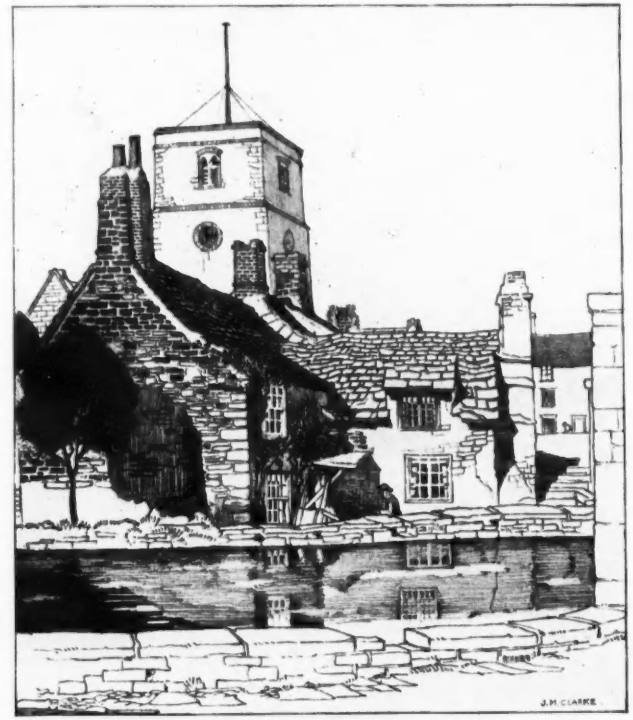
Rouen has lost much of the charm she must once have had, when she was one of the centres of French court life, a city of splendour and pageantry. Nevertheless, she still holds for us the reward that comes from the study of her streets and houses, her wonderful churches and her public buildings, a reward that is a picture of a city of the mediæval days. A. R.

THE Ghent Canal skirts the whole of the eastern side of the town of Bruges, from the Minne Water Bridge, that is, to the old Porte de Damme; on its banks stand the Porte de Gand and Porte Ste. Croix. From the high ramparts beyond the latter gate there is a beautiful panoramic view of the city and of the open country on the other side of the water. The Porte was built in the fifteenth century, and is still in a fair state of preservation. L. F. B.

THE quarrying of stone having been the staple industry of Swanage for centuries, it is natural that this quaint old seaside town should be built almost entirely of local material. It is located in that portion of Dorsetshire known as the Isle of Purbeck.

Perhaps the Mill Pond is the most interesting spot in the old portion of the town. It is situated just off the quaint and tortuous High Street, and adjoining the parish church of St. Mary.

This old-world corner, with the solid square tower of the church as a background, forms a most interesting group for the sketcher. J. M. C.



The Mill Pond, Swanage, Dorset.
(Pencil.)
By J. M. Clarke.

NEWS CONCERNING THE

Holiday Sketches Competition

AUTHORIZED BY THE ARCHITECTS' JOURNAL SKETCH CLUB

Prizes of ten and five guineas are offered by the Editor of THE ARCHITECTS' JOURNAL for the best sketches made during the months of June, July and August—one set of prizes for each month. The sketches should be the fruit of this year's holiday. They must also be unsigned. The rules are simple. Read them now. Also, do not miss THE ARCHITECTS' JOURNAL for June 18, in which another set of motto labels will be found.

THE RULES

THE FOLLOWING PROFITABLE INSTRUCTIONS WHEREIN IS SET OUT HOW TO USE THE PLEASURES OF SKETCHING FOR THE ADVANCEMENT OF THE NOBLE ART ARE ADDRESSED TO ALL SKETCH CLUB MEMBERS, PAST, PRESENT AND TO BE.

1. Three competitions will be held to cover the 1930 holiday season, the closing dates of each being in the middle of July, August and September respectively.

2. The competitions are open to any reader of THE ARCHITECTS' JOURNAL.

3. Two prizes, a first prize of Ten Guineas and a second prize of Five Guineas, will be awarded in each month's competition for the best and next-best sketches sent in.

4. Competitors may enter for any or all the three months indicated, if they choose, but no competitor can win more than one prize.

5. A maximum of five drawings may be submitted by individual competitors for each month's competition. Such batches must be sent complete under the same cover.

6. The size of the drawings is not to exceed that of Royal drawing-paper, i.e. 24 inches by 19 inches.

7. All drawings should possess some definite architectural or craftsmanship interest, but they need not be exclusively concerned with buildings, and drawings of boats, vehicles, etc., will also be eligible.

8. The drawings will be judged by the Editor of THE ARCHITECTS' JOURNAL, whose decision will be final.

9. Entries for the July competition should reach the Editor of THE ARCHITECTS' JOURNAL, 9 Queen Anne's Gate, Westminster, S.W.1, between the first post on June 16 and the first post on July 15. The result of the competition will be published in THE ARCHITECTS' JOURNAL for August 6.

10. Entries for the August competition should reach these offices between the first post on July 16 and the first post on August 15. The result of the competition will be published in THE ARCHITECTS' JOURNAL for September 10.

11. Entries for the September competition should reach these offices between the first post on August 16 and the first post on September 15. The result of this competition will be published in THE ARCHITECTS' JOURNAL for October 8.

12. A motto of one word is to be chosen by the competitor, who will remain known by this motto until the award has been made. Only then will his identity be divulged.

13. Each entry must be accompanied by a sealed letter giving the competitor's name, address and occupation (whether principal, assistant or student). The letter should also state that the competitor will observe the rules of the competition and that the drawings submitted are his work, executed on his holiday this year. It must be enclosed in an envelope sealed with a blank seal and bearing nothing but a motto label on which is written the motto chosen by the competitor and the number of drawings entered. Copies of this label will be found in THE ARCHITECTS' JOURNAL during the period covered by the competitions. (See p. xli of this issue.)

14. Each drawing must bear on the back a similar motto label bearing the competitor's motto and the number of drawings entered. No other means of identification must appear on the drawing. Drawings bearing a signature will be disqualified.

15. Owing to the drawings being submitted under a pseudonym no acknowledgment can be sent.

16. THE ARCHITECTS' JOURNAL will publish a selection of the drawings submitted.

17. No responsibility can be taken by The Architectural Press for loss or damage.

THE MOTTO LABEL IS SIMPLY A DEVICE FOR ENSURING PERFECT ANONYMITY. MORE LABELS FOR THE JUNE COMPETITION WILL BE FOUND IN THE ARCHITECTS' JOURNAL SKETCH CLUB ISSUES DURING THE PERIOD OF THE COMPETITION—I.E. ON JUNE 18 AND ON JULY 2.

LITERATURE

GAS FIRES AND THEIR SETTINGS

IT is typical of the late Sir Lawrence Weaver's practical interest in the problems that strew the path of architects that he should have applied himself to the study of the gas fire.

This book, which was reprinted from an article contributed to *The Architectural Review*, arose from Sir Lawrence Weaver's connection with the Gas Industries' Section of the Wembley Exhibition, and traces the history of gas fires from the early days of cast iron grids and asbestos tufts to its present-day development.

The text is illustrated by many photographs of gas fire settings designed by well-known architects. These range from the type of gas fire that relies upon some form of period decoration for its effect, and is usually set deeply within a fireplace of the same date, to the most severe examples of the " inset " type with the minimum of projection. Of the former, the gas fires that now occupy the beautiful marble fireplaces at the R.I.B.A. premises are the most interesting, and show how very possible this adaptation may be, while Mr. Edward Maufe's studio fireplace is perhaps the best example of the gas fire that commands its own setting.

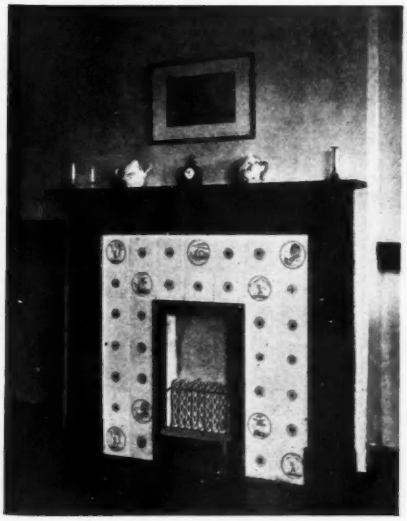
Looking through the charming illustrations, one feels that while it is possible to make a quite good-looking thing out of a period gas fire in a period setting—and please a great many people thereby—the gas fire becomes really very interesting in measure as it tends to eschew historic styles and strives to take on something of its own character, begotten by the necessities of its construction as an efficient burner of coal gas. This means that the gas fire is to shrink in size and depth, to sink into the wall, and to lose the whole paraphernalia of fire-place, hearth and overmantel. Then, being unable to masquerade in any one historic style, it can be nothing but itself—a modern gas fire.

It is the " inset " type of fire, of which there are many examples in this book, that has achieved this distinction of having a soul of its own, and it is to the development of this type, carried already far ahead by the charming example that was designed especially for Sir Lawrence Weaver's own music room, that we must look if we are to perfect the type.

It is for this reason that this review of gas fire design should recommend itself to all who are interested in the works of our own time; its production, both as to printing and format, are only additional reasons for keeping a good thing.

E. M. F.

Gas Fires and their Settings. By the late Sir Lawrence Weaver. London : The Fanfare Press. Price 7s. 6d. net.



A bedroom fireplace, flush with wall face, in Bedford House, Chiswick. Designed by Darcy Braddell.

33 Ways—
but not for the Sketcher

There are three-and-thirty ways
Of spending one's holidays. . .

ALL sorts of people spend their holidays in all sorts of different ways, but for the sketcher there is only one way of spending a holiday. For nine or ten months, or even more, his powers have lain dormant, and the hand that darted so nimbly over the paper has been bent to stricter tasks. Lack-lustre eyes and furrowed brow tell their tale of disappointment, even, perhaps, of transient tragedy.

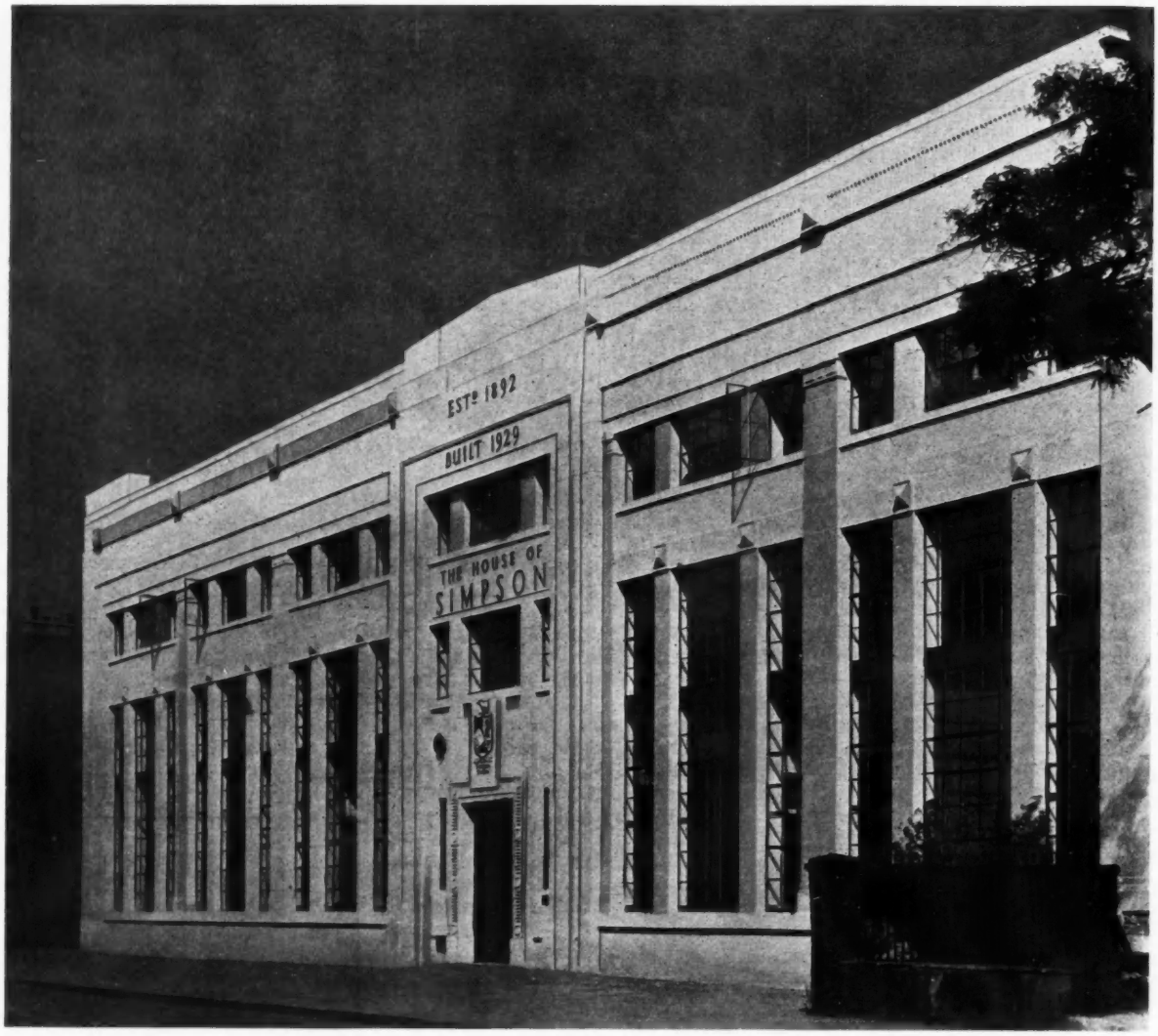
The summer grass, says Shakespeare, grows fastest by night. Not so the love of summer sketching. The coming of spring, the lengthening of the days, and, on April 13, the final paroxysm of Summer Time, fill the passionate sketcher with a frenzy of desire. By the time the holiday comes round he is ready to sketch or burst. No train or motor-car can carry him fast enough to his coveted sketching-ground. For one or two weeks (more seldom three) he abandons himself to sketching with a reckless intensity. His bliss is complete. His holiday has, for the time being, made him immortal.

The devotee of whom the foregoing picture is drawn is not the sort of person who needs encouragement. And the primary purpose of the Sketch Club HOLIDAY SKETCHES COMPETITION is not to give encouragement. Its purpose is rather to foster the social side of sketching, to spread among sketchers the combined gospels of love and of rivalry : in short, to provide a means whereby their ardour may be communicated from one to another. The members of the Sketch Club have great ideas about affectionate rivalry, which they say is the principle that makes the world go round. It is true that THE ARCHITECTS' JOURNAL makes the Sketch Club go round; nevertheless . . .

Nevertheless, all those who intend to take a holiday and/or who profess a love of sketching, should read what is printed on the facing page about the HOLIDAY SKETCHES COMPETITION. What the hospitals' silver-paper campaign has done for silver paper, this competition will do for holiday sketches. How many exquisite drawings made in past summers have been thoughtlessly thrown away or allowed to languish on a dusty cupboard shelf ! What waste ! What criminal waste ! Let not the present year's crop moulder in oblivion.



A sloping fireplace, without interior frame, in a private office, No. 9 Hanover Square, W.1. Designed by Oliver Hill.

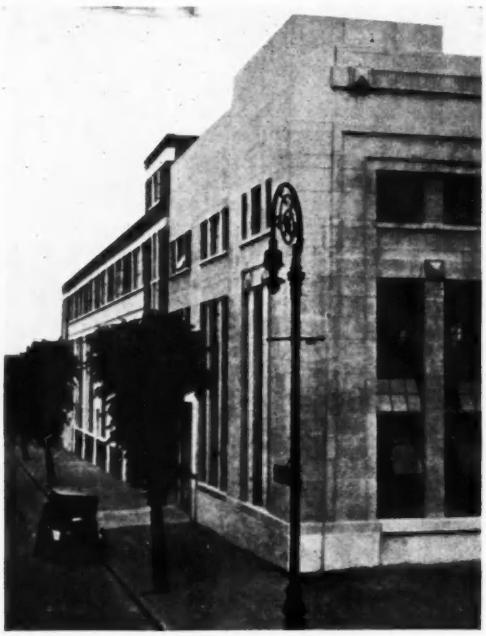


Views of the main front, to Stoke facing north, to Newington Road; and of the return, Somerford Grove.

CLOTHING FACTORY

DESIGNED BY HOBDEN AND PORRI

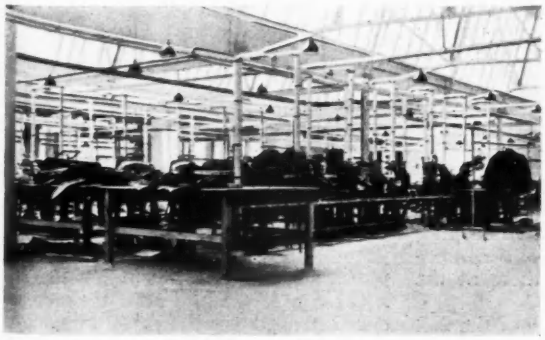
THIS building was planned as an up-to-date clothing factory, with a large open space for sewing machines and presses on the ground floor, lit by a north light roof, carried on a minimum number of stanchions. In the front building, facing west, to Stoke Newington Road, finished goods are stored, packed and dispatched. The northern building is occupied on the ground floor by pressers and inspectors; therefore, large windows extend up to the sill level of the first floor. The first floors over the front and return building, used for trouser and vest making, are also particularly well lit. The second-floor front building with a top light is used for a cutting room, whilst windows on the west front are reduced to a minimum to avoid excess of afternoon sun, thus also allowing the area of voids to be kept within the limits of the London Building Acts. Steel chutes deliver the cut-out materials to lower floors.



The building is constructed with a steel frame and solid reinforced concrete floors. The elevation to Stoke Newington Road is carried out in artificial stone; that to Somerford Grove in stock brickwork with white cement-rendered piers and artificial stone mullions, rising from a plinth of salt-glazed bricks.



Part of the architects' drawing of the ground-floor plan. The building, the entrance of which is on the easterly side of Stoke Newington Road and has Somerford Grove on its northern flank, extends farther than is shown in an easterly direction. It has been specially laid out for the particular factory processes involved, and to give large areas of uninterrupted floor-space.



Clothing Factory, Stoke Newington, N.]

A view inside the factory, showing the excellent lighting given by the north light roof. After dark, special factory lamps are in use.



[*By Hobden & Porri.*

Another view in one of the workrooms, showing benches, machine tables, etc. Some of the sewing machines can be seen on the right.

IN PARLIAMENT

[BY OUR PARLIAMENTARY REPRESENTATIVE]

The Government's Slum Bill

STEADY progress is being made in Committee with the consideration of the Housing (No. 2) Bill, which contains the Government's proposals for dealing with slum clearance.

Clause 5 provides that where a local authority is satisfied that the housing conditions in any area are dangerous or injurious to the health of the inhabitants, it might pass a resolution declaring the area to be an improvement area, with a view to the demolition or repair of such dwelling houses as were unfit for human habitation, the purchase of land for opening out the area, and the abatement of overcrowding.

Sir Philip Pilditch moved an amendment aimed at enabling a local authority to deal with an improvement area by " the purchase of such dwelling-houses or other buildings in the area as can with advantage be repaired, altered, added to or provided with better sanitation by the authority in order to facilitate the proper carrying out of the improvement." His object, he said, was to allow improvement schemes to be utilised to the full as valuable adjuncts to clearance schemes. The amendment would make it possible, by the reconditioning of unsatisfactory dwellings, for people who would be otherwise displaced to remain in the area and among their friends. It would, of course, be necessary for local authorities to receive financial assistance from the Exchequer towards the cost of reconditioning.

Mr. Greenwood, the Minister of Health, said he was not willing to encourage local authorities to become the owners on a large scale of semi-derelict cottages. It was the business of the landlord to keep his property in proper repair. Moreover, the amendment would be too costly to operate to make it of any value.

The amendment was rejected by twenty votes to seventeen, and the clause was agreed to.

An amendment to Clause 6 (Treatment of Improvement Areas), enacting that the Rent and Mortgage Interest (Restriction) Act shall cease to apply by reason only of the fact that, under the clause, the landlord comes into possession of a house or part thereof, was carried by twenty-seven votes to fifteen.

Clause 6, as amended, was agreed to.

Slum Clearance

At question time Mr. Ramsbotham asked for the number and names of those cities in Great Britain and Wales where the provision of housing accommodation was on such a scale as to permit the immediate operation of the slum-clearance proposals in the Housing (No. 2) Bill now before the House.

Miss Lawrence said that the operation of the slum clearance proposals obviously necessitated the provision of alternative accommodation for persons who would be displaced, and would generally involve an extension of the ordinary programme of building which local authorities had in hand. The Minister had no doubt that local authorities would be able to take effective steps for the removal of slum conditions and the rehousing of the people at an early date after the passing of the Bill.

Exportation of Historical Works

Mr. Lovat Fraser asked the First Commissioner of Works if he was aware of the indignation caused by the transportation of Tudor cottages and other buildings of historical and artistic interest to foreign countries; and whether he would introduce legislation to prevent this process.

Mr. Lansbury said if Mr. Lovat Fraser could give him any details of the cases which he had in mind, he would gladly have them investigated, and consider whether his department could take suitable action under its existing powers.

Hyde Park and the Carillon

Captain Crookshank asked when the carillon now in Hyde Park was to be removed.

Mr. Lansbury said he understood that the building at Wellington, New Zealand, on which the carillon was to be permanently erected, would not be ready to receive the carillon as soon as was expected, and he had therefore acceded to a request that the carillon be allowed to remain in Hyde Park until September next.

House of Commons Terrace Improvements

Mr. Mander asked the First Commissioner if he would consider providing the Terrace of the House of Commons with chairs and tables more in keeping with its historic architectural surroundings than were available there at the present time.

Mr. Lansbury said in view of the fact that in the near future the Terrace was likely to be the scene of building operations in connection with the repair of the stonework, and as the question of the raising of the level of the river wall was now under consideration, he did not think that the present time was opportune for the consideration of the improvement suggested.

Foreign Manufactured Woodwork

Major Colville asked the Minister of Health if he was aware of the large increase in the quantity of foreign manufactured woodwork imported into this country during the last year; and if he would consider what steps might be taken to encourage a greater use of British articles in a market which was to a large extent created by State-aided house-building.

Miss Susan Lawrence said the Minister was aware of the recent increase in the figures for imported builders' woodwork. He had already sent Major Colville a copy of a circular recently issued to urge local authorities to make use, to the utmost extent practicable, of goods and materials of home production or manufacture, but as the Minister pointed out to him on March 20 last, so far as State-assisted building under the Housing (Financial Provisions) Act, 1924, was concerned, Section 10 prohibited the imposition of any condition which would prevent materials from being purchased in the cheapest market either at home or abroad.

State Subsidies in Scotland

Mr. Johnston informed Miss Lee that the total amount of State subsidies paid by the Department of Health on Scottish housing from May, 1912, to March 31, 1930, was £10,161,199. Of this amount £1,625,672 was paid during the financial year ended March 31, 1930. The estimated expenditure for the financial year to March 31, 1931, was £1,772,232.

COMPETITION RESULT

The result of the Association of Architects, Surveyors and Technical Assistants' Competition for a lock-up hangar for an aerodome (arranged in conjunction with Messrs. Ewart and Son, Ltd.) has been adjudged by the assessors, Messrs. W. T. Hamlyn and Chas. McLachlan, as follows :

A Class. First, W. Brooke.
A Class. Second, F. Gibney.
B Class. First, J. W. Davidson.
B Class. Second, F. Stobart.

The competition was divided into two classes, for those over and under 25 years of age, and the prizes cover free places in the A.A.S.T.A. party to Madrid in September, including second-class rail and steamboat travel throughout and all hotel expenses, except personal expenses. The drawings will be exhibited at the R.I.B.A., 9 Conduit Street, W., on June 14, between 11 a.m. and 3 p.m.

SOCIETIES AND INSTITUTIONS

THE FATHER OF ENGLISH POTTERY

"JOSIAH WEDGWOOD, F.R.S., 1730–1795, Potter, Inventor and Man of Science," was the subject of a paper read by Mr. Harry Barnard at a meeting of the Royal Society of Arts, held on Wednesday last. Mr. Frank H. Wedgwood presided.

To realize Wedgwood's place as "the Father of English Pottery," Mr. Barnard said, it was necessary to glance at the state of the pottery industry at the time of his birth. Pottery was then a home industry, carried on at the back of the modest thatched house, with one oven that served more than one potter. The ware made was mainly of a very coarse description, the material being the ordinary marl of the district. It was, he pointed out, this state of things which must have set young Wedgwood thinking, and the serious outlook upon his every-day surroundings fostered in him the desire to improve that which must have been distasteful to a nature like his, so that his fertile brain was alert to every opportunity that presented itself to reform both the condition of the worker and the work.

Josiah Wedgwood, who was the thirteenth and youngest child, started on the potter's wheel as a "thrower" at nine years of age. Here he quickly mastered the craft of throwing, and soon became a very smart little workman. At fourteen years of age he was apprenticed for five years to his brother Thomas, to "learn his Art, Mistery, Occupation, or Imployment of Thrower and Handleing."

Towards the close of his apprenticeship he turned his attention to the ordinary cream-coloured ware, and by 1761 Wedgwood had brought this cream ware to a considerable degree of perfection. He had approached the matter systematically, making a vast range of experiments extending over many years, for the improvement of both the "body" and the glaze.

As an inventor, Mr. Barnard said, Wedgwood occupied an important place. At a time when the pottery industry in Staffordshire was quickly developing and throwing off the lethargy which had prevented any material change for so long a period, this intelligent and industrious young potter had an open eye and mind for any improvement, and seemed to grasp at once any suggestion, however slight, upon which he could work. His start as a master potter was certainly due to the discoveries he had made, which resulted in the invention of new wares, as well as new tools for producing designs and effects which were novel.

DEGREE FOR H. G. BRADSHAW

The Council and Senate of the University of Liverpool have decided that the honorary degree of Master of Architecture be conferred on Mr. H. Chalton Bradshaw, secretary to the Royal Fine Arts Commission.

RIBBON DEVELOPMENT

At a meeting of the Town Planning Institute, held on Friday last, Mr. James Macaulay read a paper on "Town Planning Economics."

Speaking of ribbon development, Mr. Macaulay said it was a new phase caused by the evolution of road transport, as to the economics of which he found it difficult to arrive at definite conclusions. Such development was undoubtedly, in the first instance, due to the individual, was not a community movement, and in this respect had taken no thought of the community's interests.

From the local authorities' standpoint in many cases a certain amount of ribbon development would be welcomed as an economic contribution towards expenditure upon arterial main and secondary roads.

From the town planner's point of view, however, it seemed clear to him that all development arose after full consideration of community and, in fact, regional and national interests, and was therefore inclined to be opposed to ribbon development as such.

In land development the frontage values along important transport routes were, as a rule, most valuable, and when it came to internal or central land the problem of efficient development on economic lines was tackled along lines which in the past had looked to the frontage or main lands paying for any loss on back or internal land.

From this standpoint, therefore, it was apparent that the highest values were likely to be attached to the sites where ribbon development was now taking place, and such development, being of a promiscuous nature as distinct from the regional or town planning method, was therefore almost certain to be uneconomic.

From its nature, ribbon development was also inclined to be uneconomic in so far as the increased cost of transport was likely to arise, quite apart from any sociological and other considerations.

It was of the essence of good town and regional planning that development should be co-ordinated towards the provision of the best community, social and home life, the saving of transport, the co-ordination of industry and commerce and the provision of the best cultural facilities for everyone, and such objects were not likely to be served if carried out along lines of ribbon development to its extreme and at present unlimited forms.

REOPENING OF ST. PAUL'S CATHEDRAL

The Council of the R.I.B.A. has arranged to celebrate the reopening of St. Paul's Cathedral on June 25, after many years' reconstruction work, by a special general meeting on Monday, June 23 next, at 8.30 p.m., at which a lecture dealing with the restoration of the Cathedral will be delivered by Captain C. Stanley Peach, F.R.I.B.A., and Mr. W. G. Allen, F.R.I.B.A. The lecture will be illustrated by slides and by an exhibition of models, masonry specimens, drawings and photographs, which will remain open till June 28 (10 a.m. till 8 p.m.).

THAMES BRIDGES CONFERENCE

At a meeting of the Thames Bridges Conference held recently, the following resolution was passed :

The Thames Bridges Conference places on record its satisfaction that the Private Bill Committee of the House of Commons, by rejecting the official Charing Cross Bridge scheme, has saved an important part of Central London from permanent injury by radically defective planning.

The Conference at the same time reiterates its conviction that a road bridge at Charing Cross is urgently required and that immediate steps should be taken by H.M. Government :

(i) To inquire into the railway position in regard to the development of London, including the relationship between the tubes and the suburban railways.

(ii) To secure by competition (open to architects, engineers and town-planners) a plan, in accordance with the data obtained, for the future development of Central London (on both sides of the river) including Charing Cross Bridge and its approaches.

The Conference is further of opinion that in view of the evidence given before the Committee on the subject of Waterloo Bridge the underpinning and reinstatement of that bridge should now be proceeded with.

WINDMILLS OF GREAT BRITAIN

The Society for the Protection of Ancient Buildings has issued a pamphlet in which an appeal is made for the preservation of windmills. They state that unless some organized effort is made to save these ancient structures, nearly all will have soon disappeared.

The Society intends, therefore, to make a record, with photographs, of all the windmills still standing in Great Britain. When this is complete, it is hoped to publish it in book-form. The Society also wishes to raise a fund so that a few carefully selected mills in different parts of the country may be

bought, repaired, and maintained as interesting monuments.

The record of windmills in Warwickshire and Cambridgeshire has already been completed, and several other counties are almost finished. Obviously, however, to compile a correct record of all the mills of Great Britain is no small task, and any information or photographs will help the Society considerably. Funds are also urgently required.

Subscriptions and information should be sent to the Windmill Secretary, the Society for the Protection of Ancient Buildings, 20 Buckingham Street, W.C.2.

OBITUARY

REGINALD BRUCE : 1883-1930

We regret to record the death of Mr. Reginald Bruce, A.R.I.B.A., M.T.P.I., at the age of forty-seven.

Mr. Bruce was a well-known town planner, a member of the Town Planning Institute, and honorary editor of their *Journal*. He first came into prominence as regional surveyor to the Manchester and District Joint Town Planning Advisory Committee. During the years 1923-1926 he prepared, in co-operation with the surveyors of the various constituent councils, the Committee's regional plan and report, which, when published, resulted in the services of Mr. Bruce being sought by other similar bodies.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATION

14859. Walker, J. H. Construction of reinforced concrete. May 14.

SPECIFICATIONS PUBLISHED

328644. Evans, W. A. Shuttering for use in concrete and similar building-construction.

307799. Weber, C. Sea and other retaining walls, dams, and like structures.

328740. Naylor, W. T. Panel-heating systems for concrete buildings.

329925. Clare, G. E. Method of constructing buildings.

329063. Lejmark, R. Method and machines for imparting compactness and coherence to a granular mass contained in a mould, and improved building block made therewith.

309083. Schlagintweit, F. Ferro-concrete beams and floors.

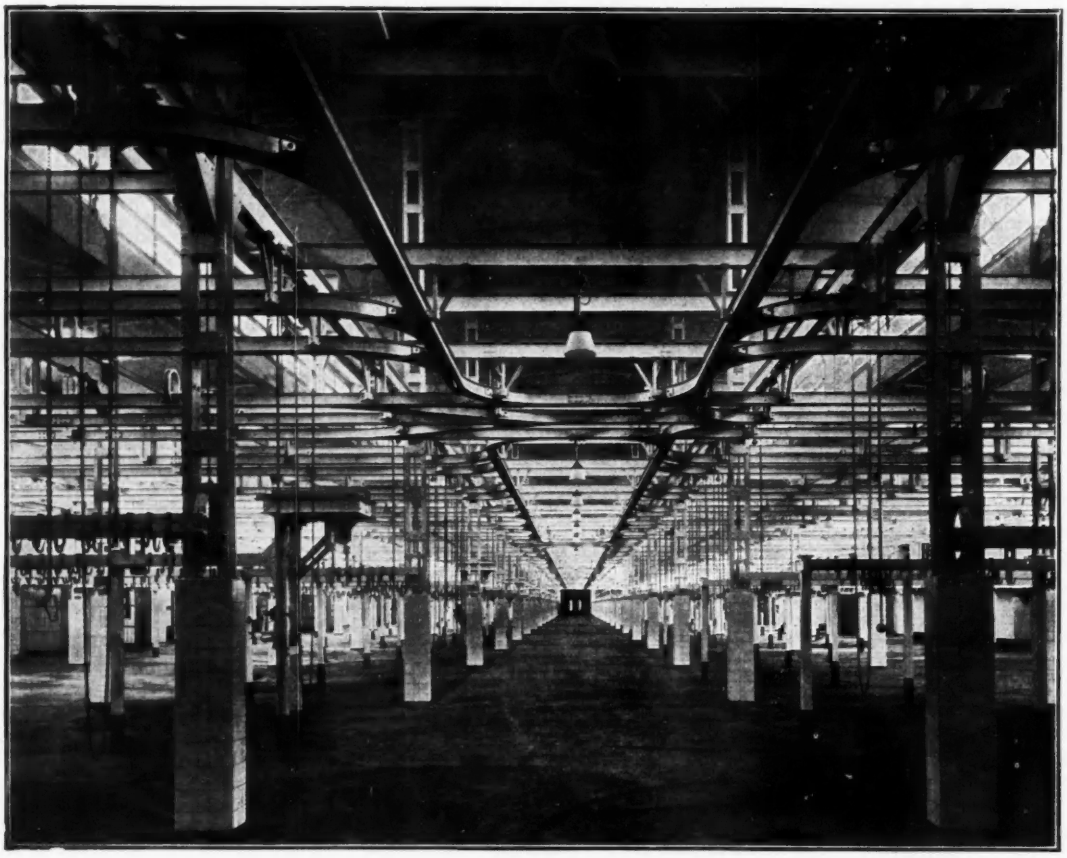
ABSTRACT PUBLISHED

327149. Shipwright, W. G. Casting floors *in situ*.

COMPETITIONS OPEN

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs : June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor : J. Ernest Franck, F.R.I.B.A. Premiums : £300, £200, £100 and £50. Particulars, etc., obtainable from A. W.



This gigantic new slaughterhouse in Hamburg's great stockyards, built for the Senate of Hamburg, was designed by Diestel and Grubitz. More than 80,000 square feet of Celotex Roof Insulation was used. The above illustration is reproduced from The Celotex News.

Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thomas, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor: H. V. Ashley, F.R.I.B.A. Premiums: £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs: July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall, which is to be built on the site of the old town hall at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

July 31.—The Dudley Education Authority invites architects having an office within a radius of fifteen miles of Dudley to submit competitive designs for a Council school to accommodate 320 children, to be erected on the Brewery Fields estate; also a school for 400 children on the Priory estate. Assessor: Herbert T. Buckland, F.R.I.B.A. Premiums: £150, £100, and £50. Applications for conditions of the competition, etc., should have been made to J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley, by April 30. Deposit £1 1s. Latest date for submission of designs: July 31.

September 1.—The Bangor (Co. Down) Borough Council invites architects or town planners to submit designs in competition for laying out the sea front within the Borough. Assessor: Professor Patrick Abercrombie, F.R.I.B.A. Premiums: £150 and £50 for first and second places, respectively. Copies of the conditions and plans will be forwarded on application to J. Milliken, Town Clerk, Borough Council Offices, Bangor, Co. Down. Deposit £1 1s. Latest date for submission of designs: September 1.

No date.—The Carlisle Corporation invites British architects to submit designs for the façade to English Street and the Victoria Viaduct, suitable for shops and business premises. The site was previously occupied by the Prison. The total length of the frontage is approximately 358 ft. Assessor: Francis Jones, F.R.I.B.A. Premiums: £300, £200, and £100. Particulars of the competition, etc., may be obtained from Percy Dalton, A.M.INST.C.E., A.R.I.B.A., City Engineer, 18 Fisher Street, Carlisle. Deposit, £1 1s.

No date.—The General Syndicate, Ltd., invites architects to submit competitive schemes for the development of a site at Liverpool, fronting St. John's Lane, Queen Square and Rose Street. Premiums: £250, £100 and £50, for first, second and third prizes, respectively. Particulars, etc., are obtainable on application to the Secretary, the General Building Syndicate, Ltd., 36 St. Martin's Lane, W.C.2.

THE ARCHITECTS' DIARY

WEDNESDAY, JUNE 4

R.I.B.A., 9 Conduit Street, W.1. Intermediate Examination. Until June 5.

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition open to the public. **10 a.m.**

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Proceed by special train to Limerick for visit to the Shannon Scheme.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art, held in the North Court. 10 a.m. to 6 p.m. (Thursdays, 10 a.m. to 10 p.m.) **10 a.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. International Exhibition of Modern Commercial Architecture. Until June 30.

THURSDAY, JUNE 5

INSTITUTION OF ELECTRICAL ENGINEERS. At Dublin. Morning: Visit to the brewery of Messrs. A. Guinness, Sons & Co. Lunch by invitation of the Company. Afternoon: Leave Dublin by special train for Belfast. Evening: Reception by the Lord Mayor of Belfast, Rt. Hon. Sir William Coates, at the City Hall.

SATURDAY, JUNE 7

Sunrise, 4.45 a.m. Sunset. 9.12 p.m.

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. At the Town Hall, Cheltenham. Southern District Meeting. **10.30 a.m.**

WHIT MONDAY, JUNE 9

THURSDAY, JUNE 12

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual Conversazione, to be held at the Natural History Museum, South Kensington, S.W.7.

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. At Inverness. Annual Scottish District Meeting. 3 p.m. Until June 14. At Belfast. Meeting of the Northern Irish District Branch. **3 p.m.**

SATURDAY, JUNE 14

Sunrise, 4.43 a.m. Sunset, 9.18 p.m.

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND. Gloucestershire Branch. At the Town Hall, Cheltenham. Conference under the chairmanship of Major-General Sir Fabian Ware, K.C.V.O., K.B.E. 11 a.m. Opening address by the Mayor of Cheltenham, followed by "Regional and Town Planning," by Captain J. H. Trye, C.B.E., R.N. Discussion on the subject to be opened by G. L. Pepler. 12.45 p.m.: Lunch. Afternoon Session, 2 p.m.–4 p.m.: "The Traditional Building of the Cotswold and surrounding Stone Districts." By H. Stratton Davis, F.R.I.B.A.; and "Modern Building and the Use of New Materials," by Thomas Falconer, F.R.I.B.A., followed by discussions to be opened by Sir Philip Stott, Bart., and J. W. Robertson Scott, respectively. **11 a.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to the William Booth Memorial Training College, Denmark Hill, S.W.3. Meet at the College at 2 p.m. **2 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Annual General Meeting and Annual Dinner. Particulars will be announced later.

CHELMSFORD PUBLIC LIBRARY COMPETITION. Latest date for submission of designs.

KINGSTON-UPON-THAMES PUBLIC BATHS COMPETITION. Latest date for submission of designs.

MONDAY, JUNE 16

R.I.B.A., 9 Conduit Street, W.1. Election of Council and Standing Committees: Election of Members. **8 p.m.**

TUESDAY, JUNE 17

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to the Innholders' Hall, College Street, E.C.4. Meet at the Hall at 3 p.m. **3 p.m**

WEDNESDAY, JUNE 18

R.I.B.A., 9 Conduit Street, W.1. British Architects' Conference, to be held at Norwich. Until June 21 inclusive. The headquarters of the Conference will be at the Stuart Hall, where an informal reception will be held during the hours 8 p.m. to 11 p.m.

THURSDAY, JUNE 19

R.I.B.A. British Architects' Conference. At the Stuart Hall, Norwich. The president will deliver the inaugural address, followed by "Regional Planning, with Special Reference to Norwich and Norfolk," by W. Harding Thompson, F.R.I.B.A., at 10.15 a.m. Lunch, 1 p.m. Assemble at St. Andrew's Hall, where Conference photograph will be taken. 2 p.m. Alternative visits during afternoon. Reception by the Lord and Lady Mayoress, at the Castle Museum, at 8 p.m. **10.15 a.m.**

FRIDAY, JUNE 20

R.I.B.A. British Architects' Conference. At Norwich. Alternative whole-day visits. Conference Banquet at St. Andrew's Hall. 7.15 p.m. for 7.30 p.m.

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "Landscape Road Designs, with Special Reference to Recent Work in the U.S.A." By Thomas Adams, F.S.I., M.T.P.I. The Rt. Hon. Lord Ponsonby will preside. **5 p.m.**

SATURDAY, JUNE 21

Sunrise, 4.42 a.m. Sunset, 9.21 p.m.

R.I.B.A. British Architects' Conference. At Norwich. Informal visits. 9.45 a.m. to 1 p.m. **9.45 a.m.**

ROYAL SANITARY INSTITUTE. Annual Congress to be held at Margate until June 28 inclusive. Various lectures, discussions and visits will be held throughout the week.

MONDAY, JUNE 23

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Westminster Abbey. Meet in the Jerusalem Chamber at 4 p.m., where Dr. Foxley Norris will address those present. **4 p.m.**

TOWN PLANNING INSTITUTE. At the Institution of Mechanical Engineers, Storey's Gate, St. James's Park, S.W.1. General Meeting. "Why Not More Progress with Town Planning." By Professor Patrick Geddes, M.T.P.I. **6 p.m.**

WEDNESDAY, JUNE 25

R.I.B.A., 9 Conduit Street, W.1. Special General Meeting. "The Restoration of St. Paul's Cathedral." By Captain C. Stanley Peach, F.R.I.B.A., and W. G. Allen, F.R.I.B.A. (Lantern illustrations.) Also, the opening of an exhibition of models, masonry specimens, drawings and photographs. Until June 28. 10 a.m. till 8 p.m. (Saturdays, 5 p.m.) **10 a.m.**

ROYAL SANITARY INSTITUTE. At Margate. Meetings of the Architectural and Engineering Sections. **10 a.m.**

FRIDAY, JUNE 27

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL SOCIETY, The Castle, Winchester. Excursion to the Joinery Works of Messrs. W. E. Chivers and Sons, Ltd., Devizes, and buildings of architectural interest in the neighbourhood. A General Meeting will be held after lunch.

SATURDAY, JUNE 28

Sunrise, 4.45 a.m. Sunset, 9.21 p.m.

WEDNESDAY, JULY 2

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION. Annual Exhibition to be held at Portsmouth until July 8.

FRIDAY, JULY 4

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Joint Meeting with the Hampshire and Isle of Wight Architectural Association. Visits to the new Town Hall (description by E. Berry Webber), the Old Bargate (description by H. P. Cart de Lafontaine), Guildhall, Empire Theatre, and Ocean Liners. Particulars are obtainable from the Hon. Secretary.

SATURDAY, JULY 5

Sunrise, 4.49 a.m. Sunset, 9.19 p.m.

R.I.B.A., 9 Conduit Street, W.1. Tour to United States and Canada by the Cunard Liner "Samaria." Returning on July 25. Members wishing to take part in the trip should apply to H. T. Leese, 26-27 Cockspur Street, London, S.W.1.

WORTHING MUNICIPAL BATHS COMPETITION. Latest date for submission of designs.

SUNDAY, JULY 6

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Excursion to Romsey and the New Forest.

SATURDAY, JULY 12

Sunrise, 4.56 a.m. Sunset, 9.14 p.m.

WEDNESDAY, JULY 16

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Annual Excursion to Denmark and Sweden, returning to London on July 29. Particulars of the tour, etc., are obtainable from F. R. Yerbury, the Secretary, Architectural Association.

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Liége. July 16–17.

FRIDAY, JULY 18

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Anvers. July 18–19.

SATURDAY, JULY 19

Sunrise, 5.4 a.m. Sunset, 9.8 p.m.

SATURDAY, JULY 26

Sunrise, 5.13 a.m. Sunset, 8.59 p.m.

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Visits to Leeds Castle, Chilham or Bodiam, etc., organized by the Canterbury and Tunbridge Wells Chapters. Particulars of the visits are obtainable from the Hon. Secretaries of the Chapters.

THURSDAY, JULY 31

LUTON TOWN HALL COMPETITION. Latest date for submission of designs.

DUDLEY SCHOOL COMPETITION. Latest date for submission of designs.

TRADE NOTES

As a result of the wish expressed by several architects to visit the Silvertown works of Messrs. Venesta, Ltd., the company has arranged a series of such visits, the first of which took place on Wednesday last. The party met at the company's offices at Vintry House, and an opportunity was given there of inspecting the suites of rooms used by the directors and clerical staff, in order to judge of the decorative effects produced by the various styles of panelling carried out in Venesta birch, Venesta oak, Australian blackbean, teak, Sapele mahogany, Corona oak batten-board, Burmah padouk, Corona walnut, and cellulose-treated Plymax. At the Silvertown works—which cover some thirteen acres of ground and where over 1,000 hands are employed—there was much to be seen of great interest in both the plywood and the Plymax sections. In the former the visitors were able to study the processes by which decorative veneers are jointed and then cemented under great pressure to the plywood base. The manufacture of Plymax was followed with equally close attention in all its stages. These included testing, sawing to size, and final conversion into motor-car bodies, barrels, boxes, and other constructional units for which the rigidity and lightness of the material offer such marked advantages.

*

Messrs. E. Pollard & Co., Ltd., have negotiated the purchase of the goodwill of the old-established and well-known firm of Samuel Haskins and Bros., Ltd. Under the terms of the merger, now announced, Messrs. Leonard Haskins and Adrian Haskins, the present managing directors of Haskins Bros., Ltd., join the board of E. Pollard & Co., Ltd., as directors, under the chairmanship of Mr. Edward Pollard, and from there will direct the continuation of the Haskins method of production in bronze metalwork and shutter construction, in the interests of their many friends and clients. In addition, members of the personnel of the Haskins metal-working and shutter-making departments are joined with those of the already extensive kindred departments of E. Pollard & Co., Ltd., which combination should add enormously to productive activity in the future. It will be remembered that the Walthamstow factory of Haskins Bros. was recently gutted by fire. A new factory is, however, already in the course of erection on the site of the burnt-out premises, and if hopes materialize this should be complete within two months and the Haskins plant which is now working in temporary premises will be moved in. Nothing but engineering will be carried on in the new factory, which will finally be equipped with, it is claimed, all the latest type precision machinery, and shutters and architectural bronze work will be specialized in. Messrs. Haskins's clients will continue to receive the personal attention of this staff, and existing contracts are being carried out with the assistance of E. Pollard & Co., Ltd., until the new factory is ready. It is interesting to note that the business of Haskins was established during the reign of George III in 1784, and has been directed by descendants of the founder ever since. E. Pollard & Co., Ltd., on the other hand, is a comparatively young firm, being founded by Mr. Edward Pollard, the present chairman and managing director, just thirty-five years ago.

*

Mr. H. Hepworth Thompson, managing director of Messrs. Holophane, Ltd., was the first man to speak on the telephone from Brazil to London.

*

The Croft Granite Brick and Concrete Co., Ltd., have sent us a booklet containing illustrations in colour of the twelve Croft Adamant marbles, which they have standardized with the object of bringing down the cost of production as low as possible. Any natural marble can be reproduced by the firm if desired. Copies of the booklet may be obtained from the company, 15 Victoria Street, S.W.1.

*

Owing to the fact that the demand for the Compton organ for cinemas, concert halls, and such-like buildings has been so great as to outstrip the works at Chiswick and Park Royal, the John Compton Organ Company, Ltd., have erected a new works in Chase Road, Willesden, N.W., from the designs of Mr. F. E. Simpkins, architect. In the new works the various departments are planned so that each operation necessary for the construction of the organs can be performed in proper sequence and with the greatest efficiency. In addition to the accommodation provided for the workshop departments, the building will contain the firm's general offices, a suite of directors' rooms, board room, and offices for the drawing and technical staffs. At present the firm have no fewer than twenty organs in course of construction for theatres in different parts of the country, including the super cinema at Victoria, S.W., and the Capitol, Haymarket, S.W. But with the additional facilities now at their disposal the firm hope to cater for theatres in overseas countries.

*

We are informed that the increased business of the Brilliant Sign Company, 1907, Ltd., has necessitated the appointment of two new directors to the Board, Messrs. W. H. Fowler and R. W. Grigg. Mr. Fowler has been with the firm for twenty-seven years, during which period he has successfully handled many departments. Mr. Grigg has for some time been sales manager in the shopfitting section, and has had a long experience of shopfitting, both on the administrative and production side. The appointment of these new directors will also enable Mr. F. G. Lucas, the managing director, to retire in the near future, a step he has contemplated taking for the last twelve months.

Messrs. Williams and Williams, Ltd., Chester, have obtained the contract for metal windows for the whole of the factory and distributing depot which the Ford Company is erecting in Stockholm. The building, it is claimed, will be one of the biggest in Sweden. Firms in five countries tendered.

THE BUILDINGS ILLUSTRATED

Following are the names of the specialists, general contractors, and some of the sub-contractors for the buildings illustrated in this issue :

Cecil Sharp House, Regent's Park Road, N.W.1 (pages 853–856). General contractors, F. Troy & Co., Ltd., who were also responsible for the joinery. Hope Bagenal, acoustic adviser; Laurence Turner and J. Simmonds, carving. Sub-contractors : Val de Travers Asphalte Paving Co., Ltd., asphalt; Stoneware, Ltd., bricks; C. W. Courtenay, stone; The Patent Impervious Stone Co., Ltd., artificial stone; Matthew T. Shaw & Co., Ltd., structural steel; Roberts, Adlard & Co., Ltd., slates; J. H. Sankey and Son, Ltd., " Fosalsil " partitions; Vitrea Drawn Sheet Glass Co., Ltd., and Vita Glass Marketing Board, glass; Goddard and Sons, wood-block flooring; Kleine Patent Fire-resisting Flooring Syndicate, Ltd., patent flooring; T. S. Knight and Son, central heating; Grierson, Ltd., electric wiring, electric heating and ventilation; Grierson, Ltd., and Troughton and Young, Ltd., electric light fixtures; Speirs & Co., sanitary fittings; Robert Adams, door furniture; Crittall Manufacturing Co., Ltd., casements; G. Jackson and Sons, Ltd., decorative plaster; Comyn Ching & Co., Ltd., metalwork; North of England School Furnishing Co., Ltd., cloakroom fittings; Synchromatic Time Recording Co., Ltd., clocks; Huntley and Sparks, Ltd., and Horace W. Cullum & Co., acoustic treatment.

Simpson's Clothing Factory (pages 874–875). General contractors, Henry Kent. Sub-contractors : H. Young & Co., Ltd., steel framework; British Reinforced Concrete Eng. Co., reinforcement; Baxter Elliot, artificial stone; Medways Safety Lift Co., Ltd., lift; Sauvée & Co., chutes; C. B. Jackson & Co., Ltd., heating; City Electric Co., electric wiring; J. Archer Grubba, consulting electrical engineer; Holophane, Ltd., electric light fittings; W. and R. Leggott, Ltd., enamelled bronze trade mark; Redalon, Ltd., " Bull Dog " floor clips.

Mr. Alfred H. Durnford, L.R.I.B.A., architect and surveyor, late of the firm of Messrs. Bethell Swannell and Durnford, has taken offices at Walter House, 418-422 Strand, W.C.2, where he will be pleased to receive trade catalogues.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

The Surrey Education Committee is to erect an elementary school for 300 pupils in Lonsdale Street, BARNES.

The L.C.C. Education Committee is to remodel the Effra Parade School, BRIXTON, at a cost of £23,500.

The Kent C.C. is to extend the BROMLEY poor-law institution at a cost of £31,000.

The Kent Education Committee is to erect a central school for 480 pupils in Upper Wickham Lane, BROMLEY.

In connection with the provision of housing accommodation in Central London the L.C.C. is to proceed with the erection of tenements at CLAPHAM, at a cost of £253,500; at STREATHAM, at a cost of £165,000; and at STAMFORD HILL, at a cost of £185,000.

The ERITH Education Committee is to erect elementary schools in Erith Road and Brook Street.

Mr. J. F. B. Cowper, architect, is to erect fifty flats at Gloucester Gardens, GOLDERS GREEN.

Messrs. Smee and Houchin, architects, are to prepare plans for the erection of a church and school at Elmsfield Gardens, HENDON.

The L.C.C. Education Committee is to remodel the elementary school in Wornington Road, KENSINGTON, at a cost of £40,000.

The KENSINGTON B.C. Works Committee has approved a plan for the erection of a new geological museum in Exhibition Road, adjoining the science museum.

The KENSINGTON B.C. Works Committee has approved plans for the erection of a block of flats on a site at the junction of Silchester Road and Calverley Street.

The KENSINGTON B.C. has approved plans for the erection of a block of flats on the site of 1-6 Onslow Houses, Sydney Place, and 2-4 Pelham Street.

The KENSINGTON B.C. has made arrangements with Messrs. Stanley Beard and Clare of Baker Street (architects), for a widening of Drayton Gardens and Fulham Road in connection with the erection of a cinema.

Messrs. R. J. and J. S. Thomson have prepared revised plans for the extensions at the Nelson Hospital, MERTON.

The Hendon R.D.C. is to erect 156 houses on sites at PINNER AND STANMORE.

Mr. H. P. Hawkes is to develop the Downs Estate, near SANDERSTEAD HILL.

The L.C.C. Education Committee is to erect a central school on the Furzedown site at STREATHAM.

Mr. P. Richardson is to erect eighteen houses at Beckford Road, THORNTON HEATH.

Messrs. Leathart and Granger are to prepare plans for the erection of a senior school at TWICKENHAM, for the Twickenham Education Committee.

On behalf of the Wandsworth B.C. Mr. R. Mountford Pigott, F.R.I.B.A., has prepared sketch plans for the erection of fifty flats in Fountain Road, TOOTING.

The WANDSWORTH B.C. is to erect seventy-two flats in Merton Road and Acuba Street, in accordance with plans prepared by Mr. G. L. Elkington, A.R.I.B.A.

The WANDSWORTH B.C. has approved the plans of Mr. G. L. Elkington, A.R.I.B.A., for the erection of a block of thirty-six flats in Garrett Lane.

Plans passed by the WATFORD Corporation: Buildings, Whippendell Road, for the Watford Electric Manufacturing Co.; house, The Gardens, for Messrs. W. King and Sons; additions, Bushey Mill Lane, for Mr. J. Gray; eight houses and garages, Bye-pass Road, for Mr. F. W. Brockett; house, The Gardens, for Mr. J. T. Clarke; house, Garden Close, for Messrs. Rice; additions, Chater School, Harwoods Road, for Herts C.C.; two houses, Kelmscott Close, for Bracey Roads, Ltd.; house, Parkside Drive, for Mr. E. A. Merrett; house, Woodland Drive, for Messrs. W. S. Weller and Son; factory premises, Bushey Lane, for Messrs. Cowan Hulbert, Ltd.

Mr. Cyril Farey is to prepare plans for a church, to be erected at WEMBLEY.

The L.C.C. Education Committee is to remodel the WEST KENSINGTON central school, at a cost of £39,000.

Mr. W. T. Curtis has prepared plans for the erection of extensions at their WILLESDEN county school, for the Middlesex Education Committee, at a cost of £33,000.

Messrs. Brightliff and Brightliff, architects, are to erect a block of flats in Malvern Road, WILLESDEN.

At a meeting of the WIMBLEDON Corporation Highways Committee the borough surveyor submitted a letter from the engineer to the Southern Railway Co., with reference to the proposed widening of the Wimbledon Station Bridge, and stated that the estimated cost of widening the bridge amounted to £11,000, and that the estimated cost of the necessary road works was £4,700. Subject to grants being obtained from the Ministry of Transport and the Surrey C.C., the work will be proceeded with.

EASTERN COUNTIES

The CHELMSFORD Corporation has received sanction to borrow £41,300, for the erection of 124 houses on the Boarded Barns Estate.

The Essex C.C. is to prepare plans for the second section of the new county offices at CHELMSFORD. The first section, for which a tender of £82,248 was accepted, will be ready in the autumn.

The Essex Education Committee has passed revised plans for the erection of a senior school at CLACTON-ON-SEA, at a cost of £22,000.

The Board of Control has approved plans for extensions at the Royal Eastern Counties Institution, near COLCHESTER.

The Bucks Education Committee is to erect a secondary school at SLOUGH, at a cost of £30,000.

Mr. A. R. Mayston, F.R.I.B.A., is to reconstruct the London Hotel, High Street, SOUTHEND, for Messrs. Whitbread & Co., Ltd.

SOUTHERN COUNTIES

The BEXHILL Corporation Housing Committee is considering the acquisition of land adjoining Burnt House Farm for housing purposes.

Messrs. Braybons, Ltd., are to erect eleven houses in Stanmer Street, and twenty-four houses and four garages at Hollingbury Rise, BRIGHTON.

The BRIGHTON Corporation is to take steps to secure a site for the provision of a colony for mental defectives.

The BRIGHTON Corporation has passed a scheme of the borough engineer, for the erection of thirty houses on the Rottingdean estate, at an estimated cost of £15,000.

The BRIGHTON Corporation Improvements Committee recommends the appointment of Mr. John L. Denman, F.R.I.B.A., to prepare a scheme for the extension of the town hall on the site to the southward of the present building.

Sir Giles Gilbert Scott is to prepare plans for the erection of a Roman Catholic Church at BROADSTAIRS.

The FOLKESTONE Corporation is to erect another 100 houses.

The GUILDFORD Education Committee is obtaining a site on the Westborough estate, for the erection of an elementary school.

The trustees of the Baptist Church are to erect a Sunday School in Commercial Street, GUILDFORD.

The GUILDFORD Corporation Water Committee has authorised the borough surveyor to proceed with the preparation of a scheme for the extension of the baths in Castle Street.

At a meeting of the GUILDFORD Corporation Water Committee, the borough surveyor submitted a scheme for the construction of an open-air swimming bath in the Paddock Gardens, and it was decided to submit particulars of this scheme and the Millmead scheme to the River Wey Drainage Committee, to ascertain whether the sites will be affected by the River Wey improvement scheme.

The HERNE BAY U.D.C. has passed plans, submitted by the Herne Bay Estates, Ltd., for the erection of fifty-one houses in Herne Road and Mickleburgh Avenue.

Plans are to be prepared by Mr. John W. Little for extensions at TONBRIDGE Cottage Hospital.

SOUTH-WESTERN COUNTIES

Mr. J. Arbuthnot Lawrence has prepared plans for a new cinema at BARNSTAPLE, for the Savoy Theatre Co., Ltd.

Captain C. W. Yates, architect, has prepared plans for the erection of 140 houses for the DURSLEY (Glos.) R.D.C.

New buildings for the ROMSEY cottage hospital are to be erected at a cost of £12,000, from the plans of Messrs. Gutteridge and Gutteridge.

The Wilts Education Committee is to erect a central school at WARMINSTER, at a cost of £11,000, from the design of Mr. T. Walker, county architect.

MIDLAND COUNTIES

Mr. H. S. Bradley is to prepare plans for the erection of a cinema in Pershore Road, BIRMINGHAM.

The Northamptonshire Education Committee is purchasing a site at BOUGHTON, for the erection of an elementary school.

The Wolverhampton Education Committee is to erect an elementary school at BUSHBERY, at a cost of £34,000.

A new cinema is to be erected at HANWELL, from the designs of Mr. G. Bertram Carter.

The LEICESTER Education Committee is to erect a secondary school in St. Mary Street, according to plans prepared by Messrs. Stockdale, Harrison and George Nott, at a cost of £22,000.

The LUTON Education Committee is to erect a school in Maidenhall Road, from plans prepared by Messrs. Brown and Parrott.

The READING Corporation is to erect 230 houses on the Whitley housing estate.

The STAFFORD Corporation is obtaining tenders for the erection of sixty houses.

The WELLINGBOROUGH U.D.C. is preparing a scheme for the erection of baths, at a cost of £25,000.

The WOLVERHAMPTON Corporation is to erect a bus garage in Bilston Street, at a cost of £24,000.

Plans for a large cinema at WOLVERHAMPTON have been prepared by Messrs. Satchwell and Roberts.

NORTHERN COUNTIES

The BLACKPOOL Corporation is to arrange a competition for designs for a shopping centre on the Town Hall site.

The BOOTLE Corporation is to erect a further 100 houses.

Mr. Hurley Robinson, F.R.I.B.A., is to erect a cinema at Stanley Road, BOOTLE.

The DARWEN Corporation has prepared a scheme for the erection of baths, at a cost of about £30,000.

The DONCASTER Education Committee is to erect a central school, from plans prepared by Messrs. Athron and Dyson.

The Durham County Education Committee has decided that the new secondary school to be erected at HOOKERGATE, shall be erected by direct labour. The estimated cost is £29,000.

The LIVERPOOL Corporation is to extend the public washhouses, at a cost of £20,000.

Mr. Peter Cummings is preparing plans for the erection of an ice-skating rink at Rusholme, MANCHESTER.

Plans passed by the MORECAMBE Corporation: Alterations to bakery, Osborne Road, for the Lancaster and District Co-operative Society; bungalow, Royds Grove, for Mr. G. Jackson; alterations, "Queen's" Hotel, for Messrs. Nuttall's Breweries, Ltd.; two houses, Bare Lane, for Messrs. H. Hillman and Sons; four houses, Devonshire Grove and Avenue, for Messrs. Holroyd and Killbank; house, Tibicar Lane, for Mr. E. Sutcliffe; alterations to conveniences, Green Street, for the trustees of Green Street Chapel; shop, Lancaster Road, Torrisholme, for Mr. H. Barker; two houses, Royd Grove, for Mr. G. Jackson; house, Upper Marine Parade, for Mr. R. Moore; four houses, Willacy Parade, for Messrs. F. Obank & Co.; fifteen houses, Knowlys Street, for Messrs. Atkinson and Shaw; two houses Bare Lane, for Mr. H. L. Moody; two houses Leyster Street, for Mr. S. Rhodes.

Mr. C. F. Murphy is to prepare plans for new buildings for the MORPETH Cottage Hospital.

Messrs. Cackett and Burns Dick are preparing plans for offices for the NORTHUMBERLAND C.C.

Messrs. Adshead, Topham and Adshead are to prepare plans for extending the municipal buildings of the SALE U.D.C., at an estimated cost of £14,000.

The SHIPLEY U.D.C. Housing Committee has approved lay-out plans submitted by the architect (Mr. Dawson) for the erection of forty-three houses at Wood Top and forty-six houses in Carr Lane.

Messrs. Wm. Pitts and Sons have prepared plans for the erection of thirty-four houses in Nab Wood Road and Nab Wood Terrace, SHIPLEY.

The WALLSEND Education Committee is to erect a school at Wellington Street, from plans prepared by Messrs. P. L. Browne and Son.

The WHITEHAVEN Education Committee is to erect an elementary school, to accommodate 400 pupils.

WALES

Messrs. A. Brocklehurst & Co., architects, have prepared plans for the erection of a Wesleyan church at BARGOED.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
E_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A^1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour ;* NAVVY, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* WATCHMAN, 1s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.

Clinker, breeze, etc., prices according to locality.			
Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.

Transport hire per day :

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
If left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 5-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* BRICKLAYER, 1s. 8½d. *per hour ;* PLUMBER, 1s. 8½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			

Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour ;* DO. *fixer,* 1s. 9½d. *per hour ;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone :			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER 1s. 8½d. *per hour ;* TILER, 1s. 8½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200 :

Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£7	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal :			
Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add per square.	18s.	0d.	
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour ;* JOINER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds) :			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1½ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1½ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 8¼d. *per hour*; MATE, *do.* 1s. 3½d. *per hour*; ERECTOR, 1s. 8¼d. *per hour*; FITTER, 1s. 8¼d. *per hour*; LABOURER, 1s. 3½d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9d. *per hour*; MATE OR LABOURER, 1s. 4d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 11½d. *per hour*; LABOURER, 1s. 3½d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 7½d. *per hour.*

Glass: 4ths in crates			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6¾
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 7½d. *per hour*; LABOURER, 1s. 3½d. *per hour*; FRENCH POLISHER, 1s. 8½d. *per hour*; PAPERHANGER, 1s. 7½d. *per hour.*

Genuine white lead, per cwt.	£3	0	3
Linseed oil, raw, per gall.	0	4	6
DO., *boiled, per gall.*	0	4	9
Turpentine, per gall.	0	4	7
Patent driers, per cwt.	1	10	6
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	2	2	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	6
DO., *flat, per gall.*	0	15	6
DO., *paper, per gall.*	1	2	6
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	6
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	1	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	0	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.
The measured work price is on the same basis . . . per ft. sup. £0 0 2½

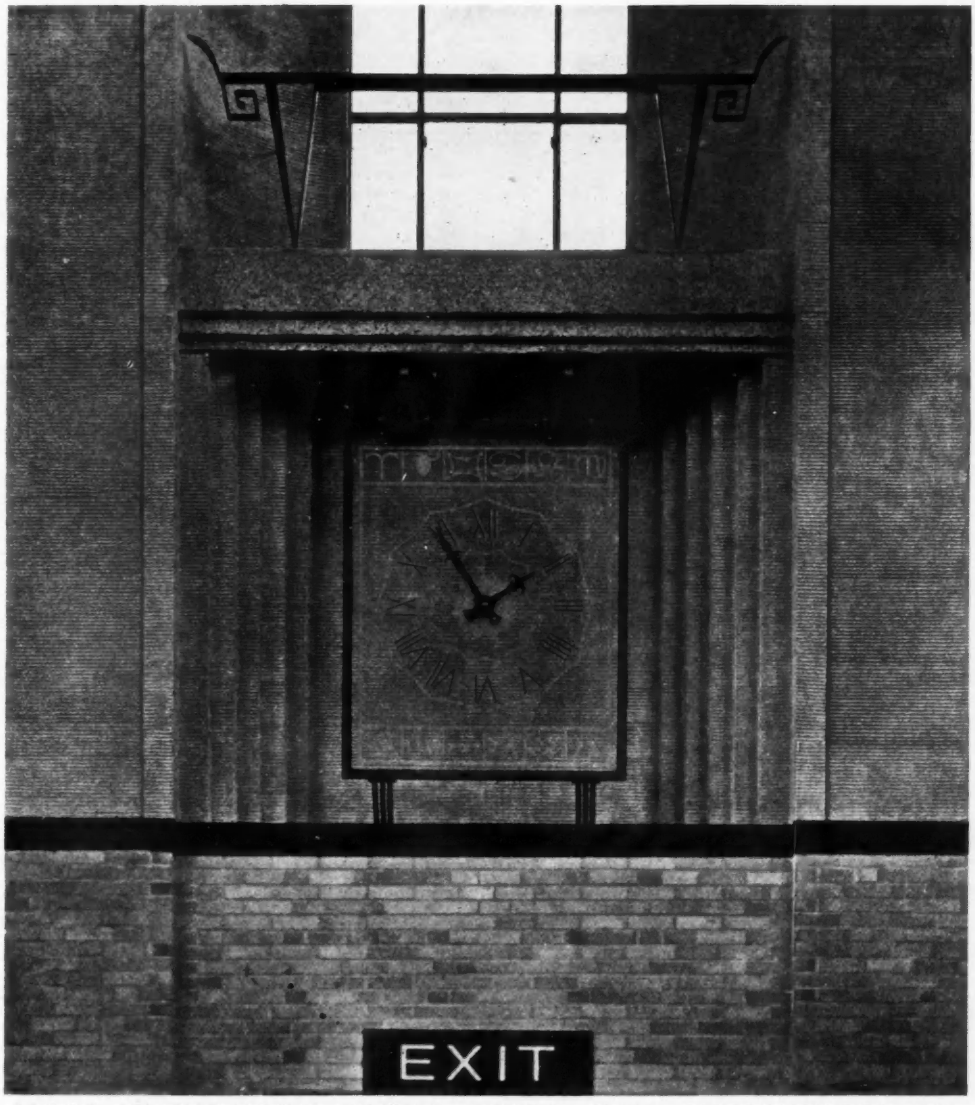
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	3
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch ..	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder ..	3½	3	2	5	4	3	8½	6½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1	0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1	6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1	0	—	—
Oregon Pine	5	4	—	5½	5	—	8	—	—	—	—	—	—

SCALE DETAILS:
A WEEKLY SERIES



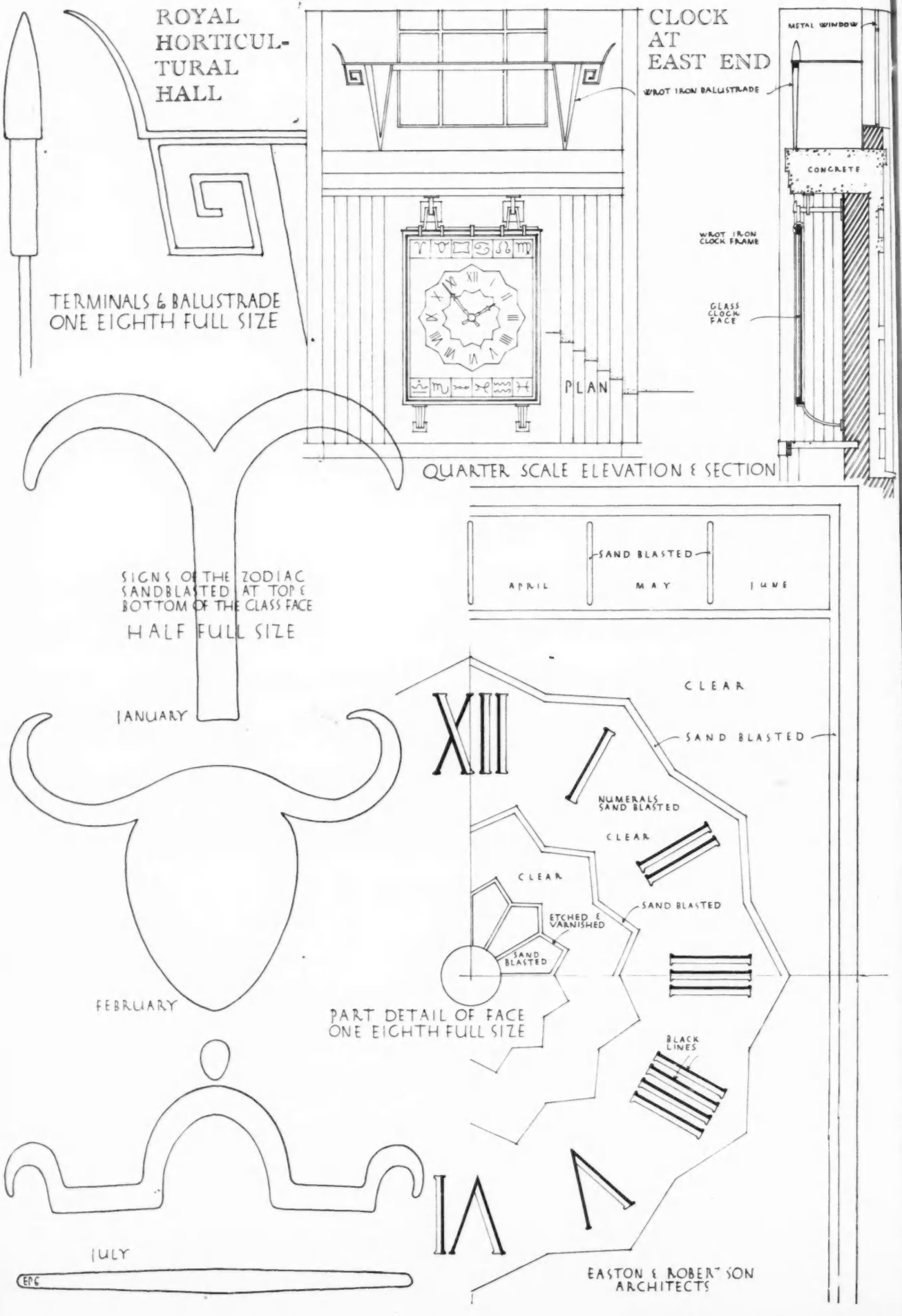
CLOCK AT THE ROYAL HORTICULTURAL HALL, WESTMINSTER, S.W.
DESIGNED BY EASTON AND ROBERTSON

THIS photograph and the drawing, reproduced to scale, show in general mass and in detail an electric clock face at the end of the main hall in the building that earned for the architects—Easton and Robertson—the Gold Medal of the Royal Institute for the best street front executed within four miles of Charing Cross during 1928.

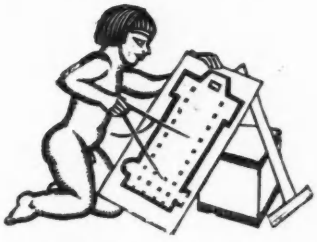
No "works" in the ordinary sense are visible. In an electric clock the mechanism required is small, and, further, it has been cleverly concealed behind the decorative star in the centre of the face.

The use of the twelve signs of the Zodiac for decoration is very fitting in a hall whose functions are so definitely connected with the seasons, and the drawing shows two of these drawn half full size to give some idea of the decorative quality which has been given to them in their conventionalized form. The plate glass face itself is framed in a band of hammered iron and hangs in front of a series of recesses in the concrete end wall. The iron balcony to the window over the clock should also be noticed for the subtle connection between its shape and outlines of plants and leaves, another allusive link.

NOTE: The drawing reproduced overleaf may be read with ordinary architect's scales (one-quarter-inch; one-and-a-half inches; and six-inches to one foot).


ROYAL HORTICULTURAL HALL
TERMINALS & BALUSTRADE ONE EIGHTH FULL SIZE
CLOCK AT EAST END
WROT IRON BALUSTRADE
METAL WINDOW
CONCRETE
WROT IRON CLOCK FRAME
GLASS CLOCK FACE
PLAN
QUARTER SCALE ELEVATION & SECTION
SIGNS OF THE ZODIAC SANDBLASTED AT TOP & BOTTOM OF THE CLASS FACE
HALF FULL SIZE
SAND BLASTED
APRIL
MAY
JUNE
JANUARY
CLEAR
SAND BLASTED
NUMERALS SAND BLASTED
CLEAR
CLEAR
SAND BLASTED
ETCHED & VARNISHED
SAND BLASTED
FEBRUARY
PART DETAIL OF FACE ONE EIGHTH FULL SIZE
BLACK LINES
JULY
EDG
EASTON & ROBERTSON ARCHITECTS

THE ARCHITECTS' JOURNAL



WEDNESDAY, JUNE 11, 1930

PLUMB WISDOM!

NOTE: For the text of the remarkable recommendation of the L.C.C. Central Public Health Committee on this vital subject, see page 905

A VERY remarkable thing is about to happen, the like and the magnitude of which English architecture has not seen these many years. If it were not for certain aspects of this event over the which a veil of reticence is drawn by a peculiarly national delicacy in these matters, the news would be broadcast from the seats of authority and taken up in tumultuous acclamation by the eager Press, to be passed on in glowing paraphrase.

Since this delicacy is as valid as any heathen taboo, it is unlikely that the event we are to speak of will be given the prominence which, as the harbinger of good fortune to a harassed profession, it most surely deserves; and our announcement must be made rather in the spirit of personal congratulation to our tribe than to the accompaniment of general jubilation.

Very well, then. It is well known to us that the means by which the health of the community is served are very often in conflict with the finer and more spiritual aspects of architecture. This conflict, represented on the one side by the nobility of abstract design and on the other by the utility of honest plumbing, has been waged unceasingly over a million drawing-boards since the law first recognized the remarkable series of inventions that started the science of sanitary engineering upon its long and successful course.

Do we not know how hardly that battle has been fought; how strewn the field has been with mangled designs? Can we not recall the devilish ingenuity with which we shuffled the plan so that the dread apartments, to which we are about gradually to refer, were placed in wells and areas and other retired places? And can we count the miles of four-inch pipes, branching in robot forests of black tubes, that have laid low and brought to shame so many of our cherished works? The retrospect is too painful for sensitive minds.

Let it be known therefore that this uneven battle draws to its close. New legislation is foreshadowed that will award victory to the weak.

Looking back, we recognize it as a wise provision that ordained in those experimental days that water-closets (there!) should be placed upon outside walls of buildings, where they might be ventilated from the open air; as we also admit the wisdom of bringing down all soil pipes upon the face of the building. The age which had placed health and convenience before every other consideration could not have done otherwise. Many years have passed since this law was fashioned, and ceaseless experiments, here and abroad, have brought a fumbling science to full fruition, nearly to become an art. The mechanical contrivances of our fathers have been simplified and made foolproof by long trial and error, and to the efficiency of sanitary engineering has been added the science of ventilation—the invention of artificial respiration for buildings.

Now, as it is our sad lot to be fettered by the results of our own pioneering, we have had to see with envy how foreigners, indebted to us for our inventions, have gone on to put them to a more logical use than we have been able, bound as we have been by our out-of-date laws. This position is, at long last, to be rectified, and from now on it will be possible, using internal ducts, artificial ventilation and electric lighting, to place lavatories where we like.

What this means to modern commercial architecture we alone know, who have fought the battle. It is a tremendous step forward. It is a reversal which, if we read our information aright, will affect planning of great buildings as nothing before, making possible all sorts of new combinations of interior rooms, and giving a new freedom in the manipulation of nearly every form of plan.

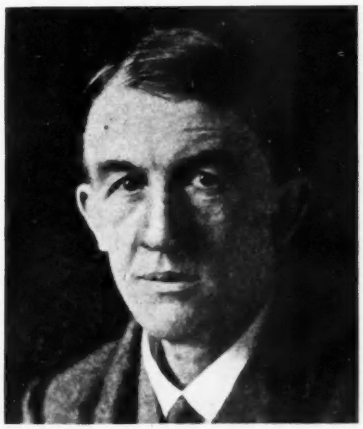
Have we not therefore cause to rejoice?



THE OCTAGON CHAPEL, NORWICH:
BUILT IN 1754 FROM DESIGNS BY THOMAS IVORY

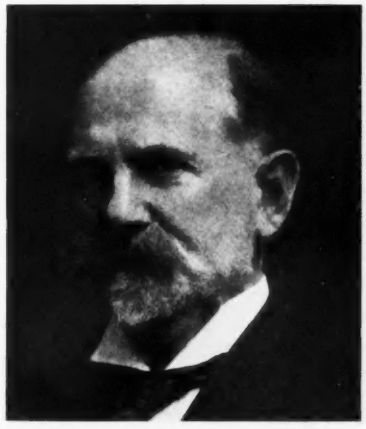
Behind this unusual building lies an interesting story. Robert Brettingham, who, it may be noted, had taken out his freedom of the city of Norwich as "bricklayer" more than thirty years before, in 1753 offered to subscribe £30 towards the expenses of the project, at the same time submitting drawings of his own design therefor. His tactics were so far successful that he was actually appointed architect and surveyor for the work at a fee of 3 per cent. on its cost. But there were other designers in the field, and, as he gave, besides, various causes for dissatisfaction, Brettingham's appointment was, after considerable dispute, cancelled. He was paid ten guineas for his drawings (and, incidentally, nothing more was heard of his donation). Other entrants in what had some of the features of a limited competition were Lee and Rawlins, but it was Thomas Ivory (1709–1779) who eventually carried the day. He had a model of his scheme prepared, and it is to be imagined that its novelty (for he is credited with the origination of the octagon idea) wrought in his favour.

NEWS & TOPICS



John Watson, A.R.S.A., F.R.I.B.A., the new President of the Royal Incorporation of Architects in Scotland. He is a partner in the firm of Watson, Salmond & Gray and was awarded the Scottish Architecture medal in 1927.

Sir Herbert Baker, A.R.A., F.R.I.B.A., who was made a Knight Commander of the Indian Empire in the King's Birthday Honours last week. He was architect for India House, London, and the secretariat and legislative buildings, Delhi. His South African work includes the Union Buildings, the Government House, and Cathedrals in Salisbury (Rhodesia) and Pretoria.



THE CITY OF PILGRIMAGE

NORWICH, so near to the East Coast, has the tang of the North Sea in its air, and I hope a little of the spicy breeze will show itself in the deliberations of the R.I.B.A. Conference. The old city is full of those angularities which give personality to a place. Even the names of the parishes and roads seem to stick out for the tongue to fall over, or the ear to be tickled by—Tombland, St. Peter per Mountergate, St. John Timberhill, St. Martin's-at-Oak, Brazen Door Gates, Unthank Road.

★

Of course, Norwich, though founded B.C., is a Gothic city, as Old Crome's fine picture of it from Mousehold Heath shows very clearly. The beautiful atmosphere is vibrant with spires and towers, and the windmill, though built in the seventeenth or eighteenth century, is full of the Gothic spirit. The late G. G. Scott perpetuated this tradition with his exquisite church of St. John, which everyone should see, if only to compare with the work of his son. Of the older Gothic work, the Cathedral, St. Peter Mancroft, and the Castle are the most important. Much of the latter has been rebuilt, but the solid and severe look of dominance cannot be destroyed even by restoration. It reminds me of some modernist work on the Continent. Within, all is delightful now, for the rooms are used as a museum for the best collection of stuffed birds in England, and as a picture gallery, whilst its former occupants, the jail-birds, are given a roost elsewhere.

THOMAS IVORY, NORWICH ARCHITECT

The lives and works of the eighteenth-century architects of Norwich have been described by Mr. Stanley J. Wearing, F.R.I.B.A., in his charming little book, *Georgian Norwich, Its Builders*, which should be in the hands of every visitor. The most competent was Thomas Ivory, who designed the Octagon Presbyterian Chapel (see frontispiece). He obtained the commission from the most difficult client in the world, viz., the building committee of a religious body, and his clever manœuvres and manifestations are a lesson in how to become a "real architect." He also built and managed a theatre, "finished with every possible degree of elegance and convenience," as his son said, "in a feeling of affectionate gratitude to a deceased parent."

ROMANCE IN THE MARKET-PLACE

I must remind all London visitors to Norwich, however, that, first and last, it is a market town. We Cockneys miss a great deal of the romance of the streets in not having our market day, with flocks of sheep driven down the Strand and bulls tied in rows to rings in the walls of Trafalgar Square. But, really, the plan and layout of cities is often dependent on the routes used by men and beasts from the country round, who flock in on one day in the week. Norwich is happy in having not only a noble market-place, but a feeling of the villages from which the market people come—I mean, that in many odd nooks and narrow streets are cottages with East Anglian pantiles, and many walls are built of the knapped flint for which the countryside is famous.

THE KING'S BIRTHDAY HONOURS

The honours list reveals no new architectural knights, although Sir Herbert Baker is made Knight Commander of the Indian Empire. He has prepared plans recently for a new building in Northumberland Avenue for the Royal Empire Society, and bids fair to eclipse Sir Edwin Lutyens' output ton for ton.

★

The knighthoods bestowed upon Mr. F. W. Goodenough, the controller of sales for the Gas Light and Coke Company, and upon Mr. V. G. Crittall, the pioneer of standardized metal windows, will be applauded by the profession at large. It would be difficult to imagine two other men who have better served the cause of architecture in this country. Their record of usefulness is a tribute to exactly the type of intelligence that appeals to architects.

THE BURDENS OF WATER SUPPLY

One is so apt to imagine water as heaven-sent and not to be paid for unduly that the difficulties of supplying water are apt to be overlooked. Heaven knows we have heard enough of water in the last few years; too much water or too little, but the actual position over the country at large we know little of, nor of the effect of the gigantic housing developments on the sources of supply.

★

One aspect of the problem is reflected in the chronic shortages of water in remote villages, which are unprovided for by the larger undertakings. The average consumption

has risen from seven to fifteen gallons per head daily, and ancient sources are totally inadequate. Needless to say, the supply to these places is a quite unprofitable business.

★

Another difficulty arises out of the wide arterial roads, which should not of course be used for ribbon housing development. These roads are too wide for a central pipe with branches to each side, and the burden of a dual main is too great for any water company. The imposition of a rate on property to pay for the extra main will serve to show the foolishness of building great traffic roads and using them for low-rated property. No more foolish act was ever committed by responsible authority.

RIDDLES OF SPEED AND SPACE

Have the automobile and the electric train become stabilized as methods of transport, or, so far as transport is concerned, are we still living, as we were at the commencement of the century, in an age of limitless uncertainty? These pertinent questions were asked by Professor S. D. Adshead in *The Morning Post* last week. If, he says, the mechanism of the automobile has reached perfection —which we may well assume it to have done, for experience teaches us that there is a climax to the perfection of any particular kind of machinery—then we can plan London for the future with a confidence not previously justified.

★

Up to the present most of the readjustment to new conditions made possible by the motor-car and the electric train has been hasty, accidental, experimental and, on the whole, unfortunate. One cannot help agreeing, therefore, with Professor Adshead that the problem at the moment—and it is a problem more insistent in regard to London than anywhere—is how still further to extend traffic facilities, how to gather together the scattered threads and how to weave them into an organized whole.

★

It is a little ironical, as Professor Adshead points out, that we have found the best way to reduce the speed of traffic to a pace that will not be dangerous in a populous district is to do exactly what we thought was wrong twenty years ago, viz., to encourage the construction of a type of road that will not permit of too rapid and dangerous driving, with good visibility in every direction, but which may be narrow and twisted and obstructed at all junctions with main roads. Such roads will save a host of policemen and prevent all England from being converted into a network of racing tracks.

LIVERPOOL'S PRIDE

It is inevitable that the civic spirit should flourish more conspicuously in the provincial cities than in London. The capital, from its sheer size, is at a disadvantage in this respect (I am not at all sure that this does not lie at the bottom of such episodes as that of Charing Cross Bridge). Clearly, this spirit animated many of the speakers at last week's dinner at Liverpool of the builders of that district. Professor Abercrombie, remarking with justice that the practical side of building was being turned over to what was called a co-ordinating engineer (and to this burning question I see the correspondence columns of this JOURNAL have been opened), went on to observe that in Liverpool the architects had struck a happy balance with the engineers. Naturally, he had no difficulty in pointing with pride to the result in many magnificent structures in the town. But he could hardly be president of the Liverpool Architectural Society without being conscious of the bad spots, and with characteristic frankness put his finger on two of them. "I think," he said, "our Pier Head is in a very shoddy state"; and "a rash of bungalows is spreading over the country." That is as true of Lancashire as of the rest of fair England. And the keenness with which he deplored it is the measure of his pride in a city that can show the new Holt building and the ever-growing Cathedral. Incidentally, it now seems certain that Liverpool Roman Catholics will realize their ambition and shortly see their own vast cathedral arising on the Workhouse site. Yes, a proud city is Liverpool !

A NORMAN CHURCH PRESERVED

The tiny church of St. Nicholas at Studland, Dorset, is, with Iffley and Stewkley, a nearly perfect specimen of Norman work, within, if not without. There was a time when disintegration of the 800-year old fabric was hastening its ruin. That time is past, and merciful repair rather than restoration has made everything but its roof timbers sound and durable for more hundreds of years to come.

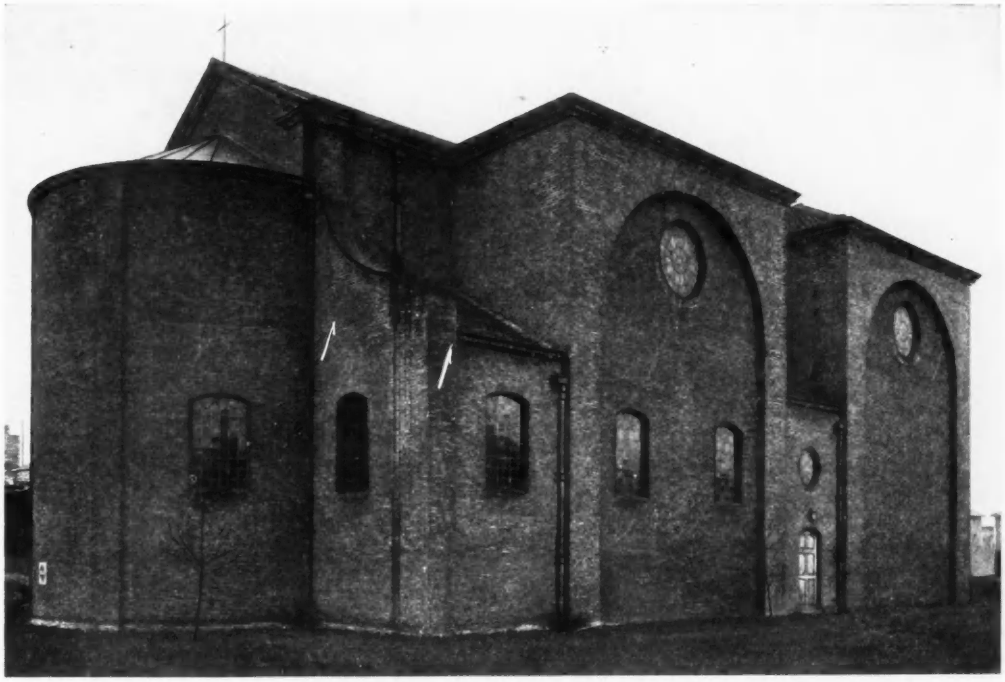
ASTRAGAL



The tiny Norman church of St. Nicholas, Studland, Dorset, now made safe for the years to come by the aid of the Church Building Society, Incorporated, from whose recent report this illustration is taken.

CHURCH AT GORTON, MANCHESTER

DESIGNED BY WALTER TAPPER

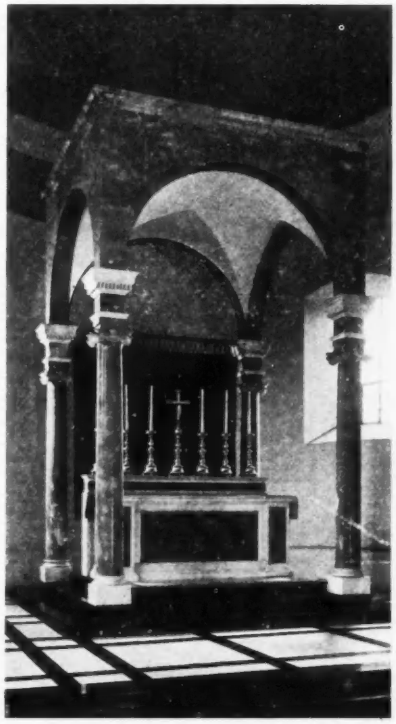


A view of the church from the north-east. The walls are of brick, five courses to one foot. The main roof is covered with Roman tiles, that of the east (left) end with copper. A further section of the church remains to be built.

THE Church of Our Lady of Mercy and St. Thomas of Canterbury owes its name and its being to a benefaction left by Mrs. Angelina Frances Clarke. A sum of £10,000 was left by this lady, a daughter of Sir Bryan Milman, at one time Resident of the Tower of London, with instructions that a basilica should be built and placed under the patronage of Our Lady of Mercy and St. Thomas of Canterbury. The money was left in trust with the Community of the Resurrection, Mirfield. Mrs. Clarke, whose husband was British Consul in Zanzibar, was herself responsible for a work on the architecture of Sir Christopher Wren.

Mr. Walter Tapper was commissioned for the work, and two-thirds of the basilica has now been completed. On entering, the visitor is immediately arrested by the proportions of the building; the apse and the two completed domes, with the round arches and square pillars, giving one a vivid idea of the appearance of the church when the final dome is added.

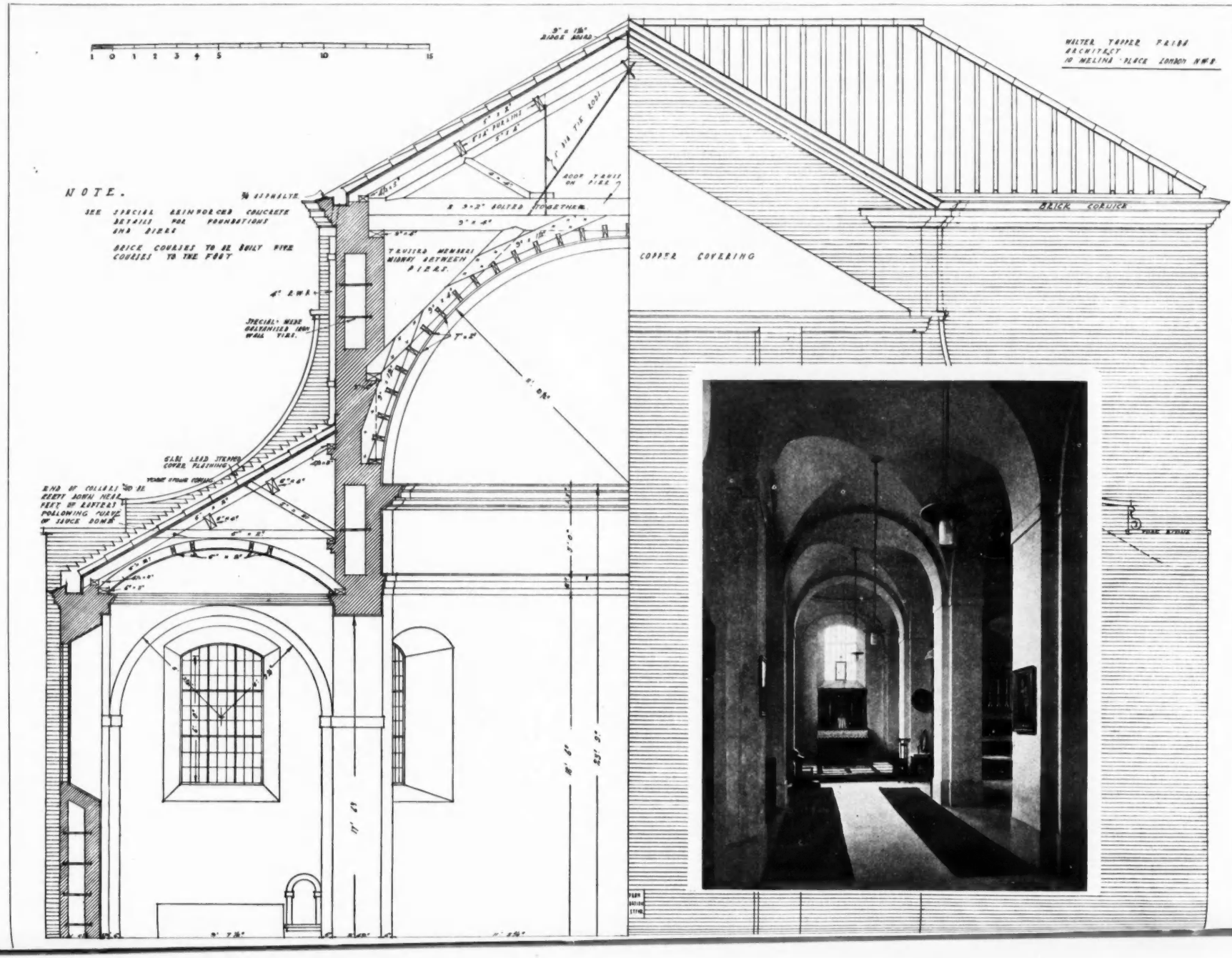
There is a baldacchino over the altar, with pillars in yellow and white marble, and a canopy in Derbyshire alabaster. The altar is in marble of the same two colours, and is set in the midst of the sanctuary pavement and on the customary three steps.

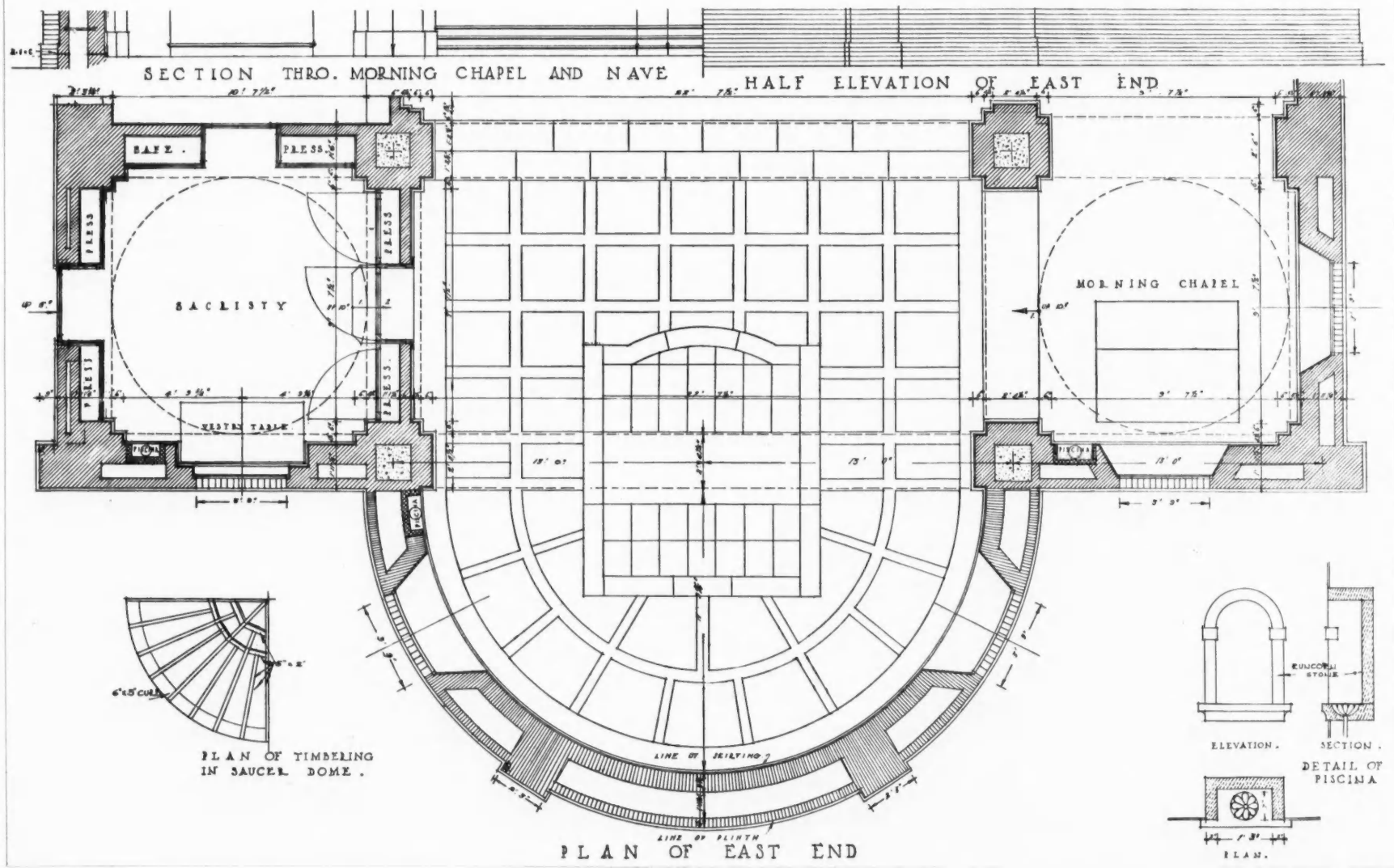


On the north side of the nave is the morning chapel, and on the south the sacristy and choir vestry. Special features of the church are the organ and choir lofts, connected by the massive rood loft which separates the two domes. Entrance is gained to the loft by a special staircase leading up from the choir vestry on the south side of the church. The plaster of the walls has been washed over with a cream wash and as a result, on the drabbest of Manchester days, there is a glow and brightness about the interior which is most refreshing.

The church was consecrated by the present Archbishop of York, Dr. Temple, who was then Bishop of Manchester. The church is set in the midst of modest corporation dwelling-houses of the northern Metropolis.

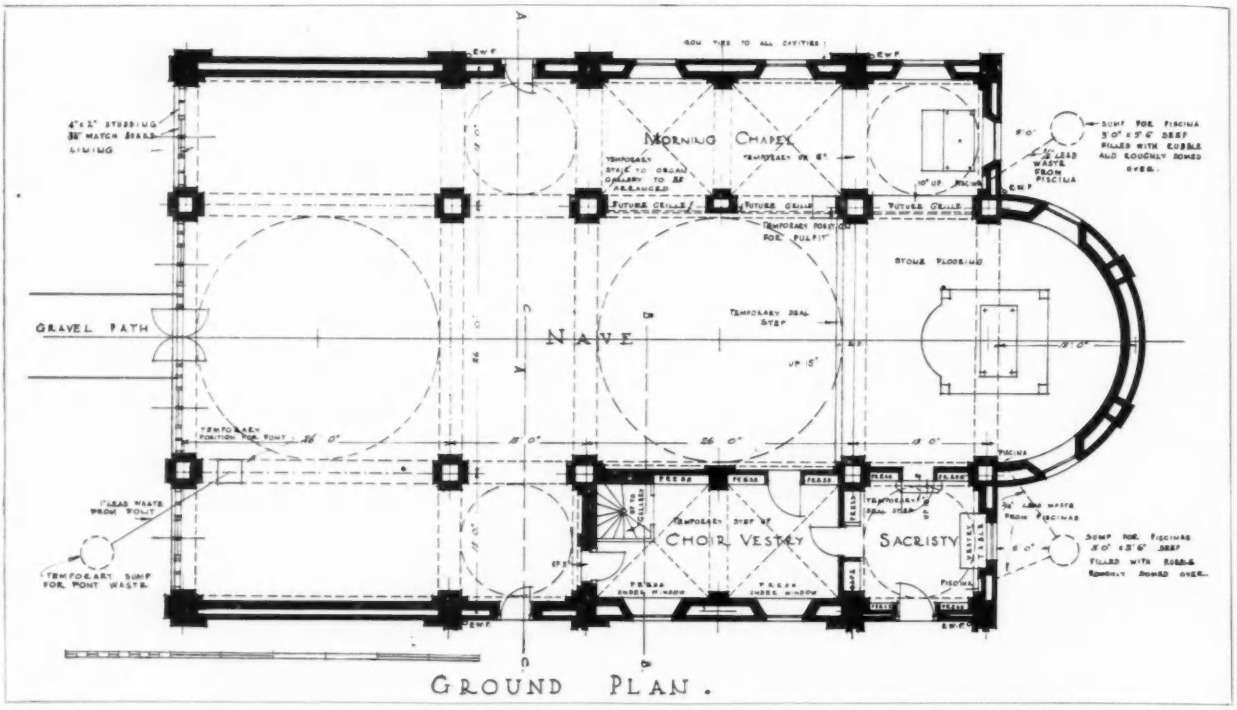
The pillars of the baldacchino are in yellow and white marble, and the canopy is in Derbyshire alabaster. The altar is in marble of the same two colours.


WALTER TAPPER F.R.I.B.A.
ARCHITECT
10 MELINA PLACE LONDON N.W.8.
NOTE.
SEE SPECIAL REINFORCED CONCRETE DETAILS FOR FOUNDATIONS AND PIERS
BRICK COURSES TO BE EVEN FIVE COURSES TO THE FOOT
COPPER COVERING
BRICK CORNICE



Church at Gorton.] [*By Walter Tapper.*

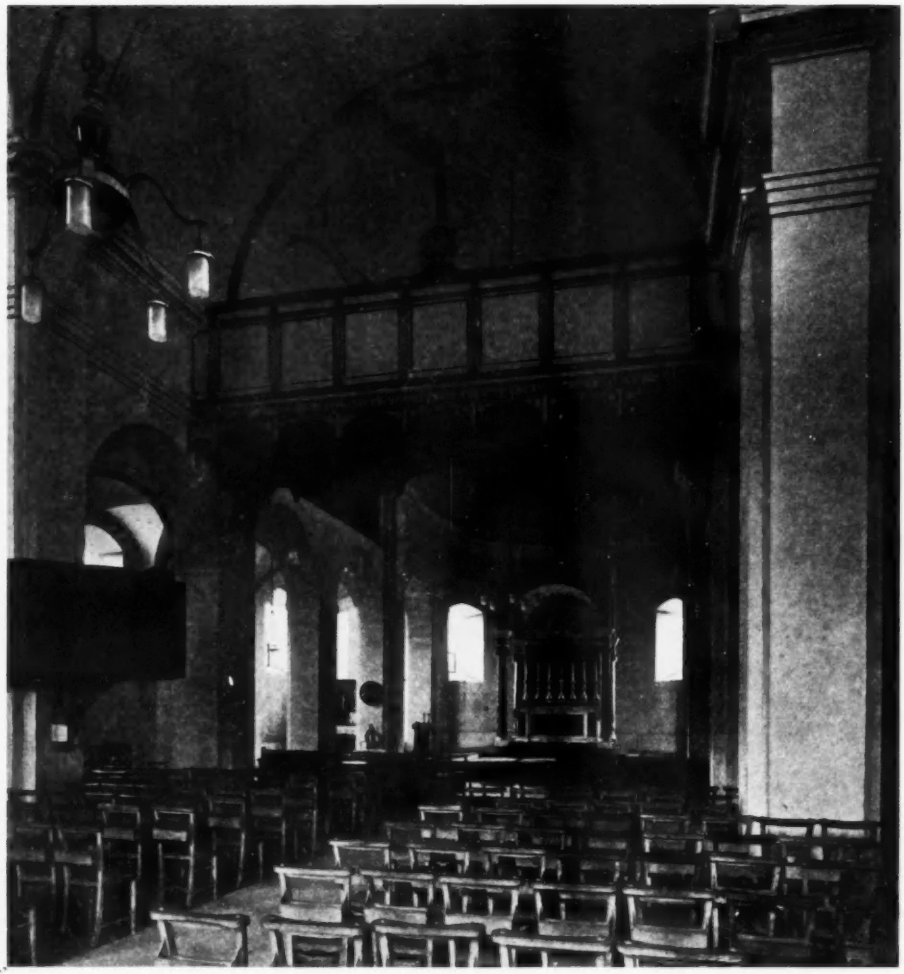
These two illustrations—the architect's working drawing of the east end, and photograph of the morning chapel—should be compared with the plan reproduced on page 894. The morning chapel extends along the north side of the nave for a distance of about 40 feet and is balanced on the south side by the sacristy and, behind it, the choir vestry.



Ground floor plan. The church measures approximately 190 ft. long by 56 ft. wide. Special features are the organ and choir lofts, which are connected by the massive rood loft shown below and entered by a staircase from the choir vestry.

CHURCH AT GORTON

BY WALTER TAPPER



The east end of the church, showing the altar and rood loft which connects the organ and choir lofts.

The walls, of plaster, cream washed, reflect an atmosphere of brightness on the dullest of Manchester days.



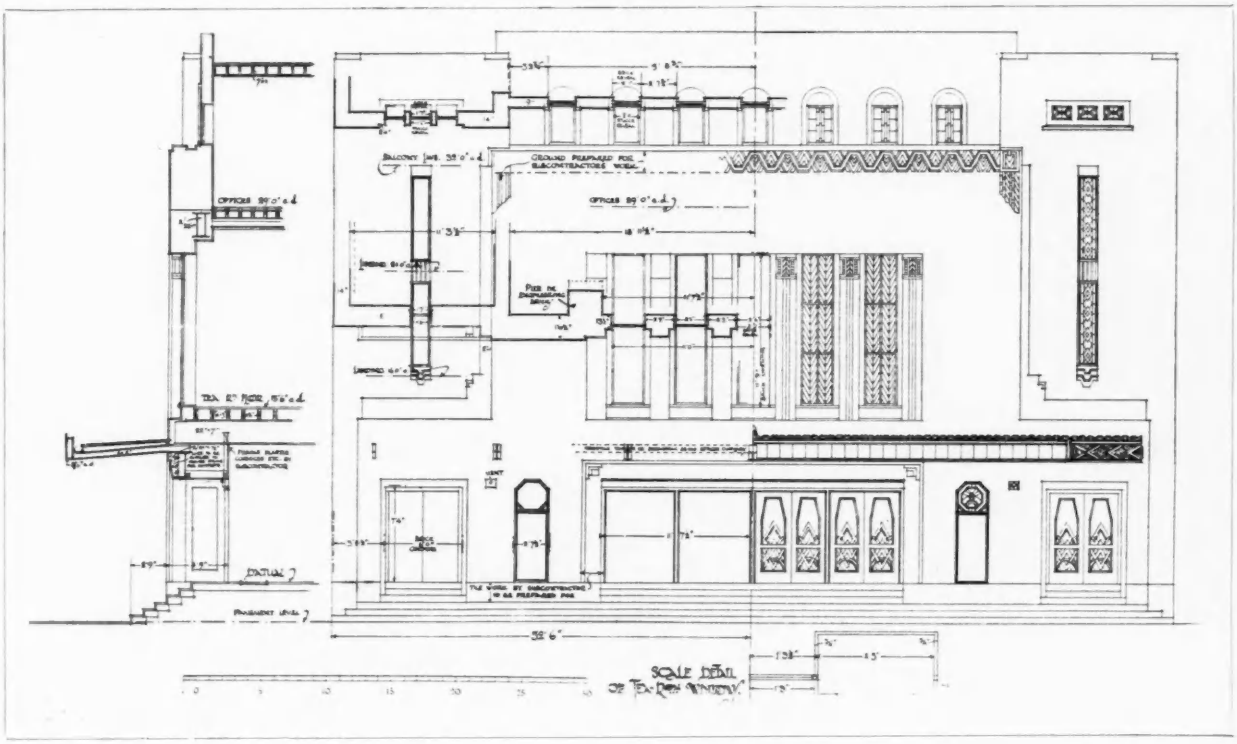
The principal front faces Church Street, and can be seen from the main road from London to Dorking. The five windows on the first floor light the café, entrance to which is obtained from the doorways at each end of the façade. These doorways also serve the entrance hall to the cinema. The main elevation has a white surface and is decorated in colours of brilliant hues. Reproduced below is the architect's working drawing.

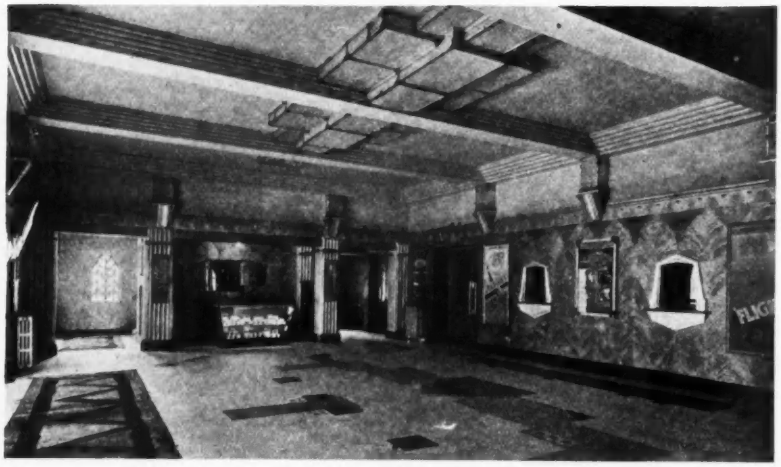
CAPITOL CINEMA, EPSOM

DESIGNED BY ROBERT CROMIE

EPSOM now possesses one of the most modern cinemas in the country, replete with every known improvement in silent and speech kinematography. The main entrance is in Church Street, and leads into the entrance vestibule, giving access to the auditorium and to the balcony.

In the vestibule the floor is of coloured ceramic mosaic laid in design, and the ceiling is of silver colour, with a single lighting fitting of cubist pattern running



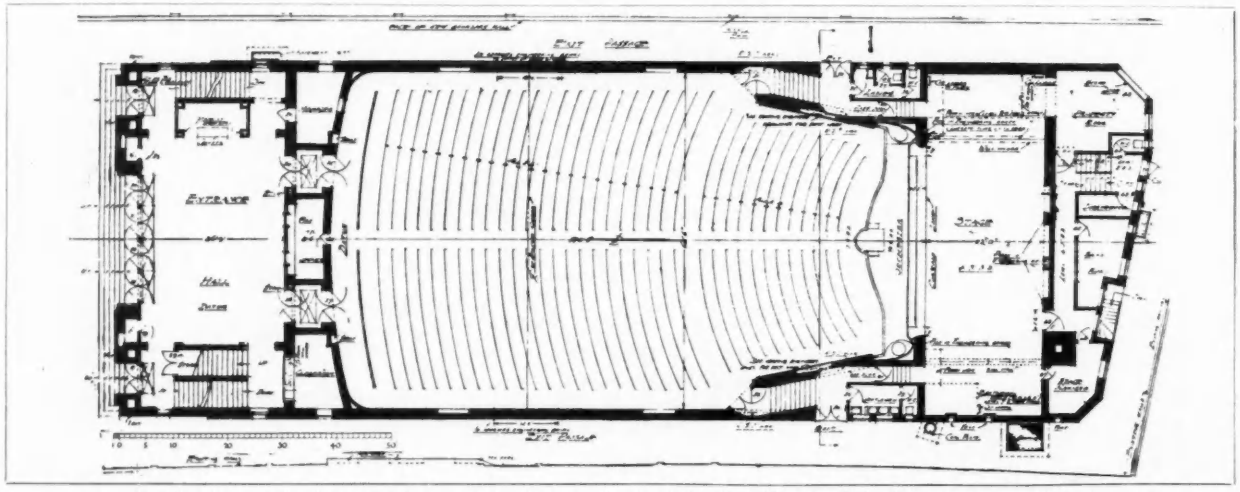


The entrance hall, looking towards the "chocolate shop." On the left are the doors leading to Church Street; on the right, the pay-boxes and the doors to the auditorium.

The lighting of the stage from the auditorium has been arranged by the provision of spot light chambers in the roof, as well as at each side of the bioscope chamber, while the stage itself is adequately equipped with grid, electrician's fly perches, flood and float lights. The whole of the curtains, dimmers and lighting effects can be controlled from the bioscope chamber —necessitating ten miles of electric cable.

Low-pressure hot-water radiators are installed, and all the corridors and entrances are superheated. A plenum system of forced air is also provided.

The café is decorated in black, flame and primrose, silver and gold. It contains built-in settees and metal furniture. Gas and electric cookers, boilers and urns are installed for quick service. All food is kept in refrigerators.



Plan of auditorium. The theatre has been specially designed for "talkies," and is provided with a balcony and a full stage.

along its centre. There is a frieze of lanterns of hanging glass, and a "chocolate shop." The pay-boxes each bear a marked resemblance to the proscenium arch within the auditorium.

On the walls of the auditorium the colours range from primrose to sun tones and orange. The ceiling is designed on the principle of a loggia, using the motif of beams in silhouette against the sky effect. It is decorated in pale greens, jade, cerulean blue, amethyst and silver, and is architecturally "supported" by the vertical lines of the balcony walls, from which it is separated by an enriched frieze of silver and jade.

The stage curtains, of a special Parisian fabric, and the proscenium are surrounded by a deep cove of scolloped planes, with illuminated edges, and treated in plain silver. The proscenium frame itself is finished in colours of metallic lustre. On each proscenium splay is an illuminated grille.

The lighting of the auditorium is arranged on three circuits, which enables effects to be obtained for the intermingling of colours.



Capitol Cinema, Epsom.] [By Robert Cromie.

The proscenium, looking from the balcony. It is surrounded by a deep cove of scolloped planes, with illuminated edges, and treated in silver. On either side of the proscenium is an illuminated grille, an illuminated clock, and an exit doorway.

Settling-Up Honeywood : iii

THE STATEMENT OF ACCOUNT

BY KARSHISH

(H. B. CRESWELL)

¶ *Although the house has only been occupied five weeks, there has been complaint of damp by the owner, Sir Leslie Brash, and of defective drains by Lady Brash. The former has, apparently, been disposed of; the latter has not. Grigblay, the builder, has also written privately to Spinlove, the architect, warning him that the patent paint inside the house, used by Brash's orders, is going wrong.*

GRIGBLAY TO SPINLOVE

Dear Sir, 12/3/26.

Our estimate for certificate, £3,500, is as follows :

Amount of contract ..		18,440
Less 5 per cent. retention	922	
Received on a/c ..	15,500	
		16,422
		2,018
Add balance variations account, say		1,500
		£3,518

We shall be glad to receive your certificate as this matter has been standing over some time.

Yours faithfully,

On completion of the work to the architect's satisfaction—an event which, we understand, is dated February 10th—the 10 per cent. retention of the value of work done was reduced, under the terms of the contract, to a 5 per cent. security for the builder's performance of his covenant to make good defects appearing within nine months. Grigblay was at any time entitled to require the value of extra work to be included in the computation of Spinlove's certificates, but does not appear to have asked for it.

GRIGBLAY TO SPINLOVE

Dear Sir, 13/3/26.

Mr. Grigblay visited Honeywood yesterday and is of opinion that the damp on chimney-breasts is due to rain driving into the brickwork of the chimney. It also drives through the parging into the flues which may account for complaints made to Bloggs of the flues not drawing. We think that the trouble can be cured by treating the face of the brickwork with soap, unless you prefer application of some special waterproofing. If you will let us know what you wish we will estimate cost of same.

Yours faithfully,

Grigblay's readiness to supply an estimate is no doubt to make clear to Spinlove what he is slow to discern for himself, namely, that the architect, and not the builder, is responsible for the architect's mistakes. Having regard to the exposed situation and the extreme, though not exceptional, porosity of the facing bricks, Spinlove ought, as Grigblay says, to have put dampcourses through the stacks and piped the flues. He will, no doubt, on the next occasion when a similar conjunction of circumstances arises, benefit by this experience ; but it was no part of the builder's duty to foresee the trouble : a builder has preoccupations enough without thinking for the architect ; and though he would, for his own credit and in a spirit of collaboration, warn the architect when he saw dangers ahead, he may have learnt that such interferences are not always welcomed ; and that when they are, and the precaution proves ineffective, or for any reason is afterwards regretted, the trouble he puts himself to lands him in trouble he could do without.

Perhaps this is Spinlove's first experience of building with sand-faced bricks in an exposed situation. In that case he will have good reason to appreciate the device of the hollow wall which he has apparently carried out with exact care. If the ties binding the 4½-in. inner wall to the 9-in. outer wall were not of a particular pattern, the rain, which Grigblay discerned to stream down the inside of the outer wall when driven by heavy wind, would creep across to the inner ; and if the clearing-battens, hung in the space between the walls when the bricks were being laid, had not been carefully maintained, droppings of mortar would have lodged on these ties with the same result. If, also, Spinlove had neglected to carry the hollow space down through the dampcourse which stops water rising from the ground into the wall; or had mortar droppings been allowed to accumulate at the bottom of the hollow ; the water flowing down the face of the outer wall would have soaked across into the lower part of the inner. So, also, if the dampcourse had not been below the concrete foundation of the wood floors and above the ground—that is to say, if it had been in any other position than opposite the 4-in. or 6-in. thickness of dry brick rubbish on which the concrete floor foundation rests—damp could, again, find its way into the bottom of the inner wall. We gather that none of these things has happened, for it is evident that the south front of Honeywood Grange is being severely tested and Grigblay noticed nothing wrong. How severe that test may be in an exposed situation is only fully known by architects and builders of experience.

Rain will drive right through a 14-in. wall of London Stocks laid in lias lime mortar faced with the best sand-faced, hand-thrown bricks, and run from the under side of concrete lintels over window openings so as to collect in pools on the floor. It will penetrate 9-in. walls of impervious Fletton bricks laid in hydraulic mortar and cement stuccoed in two coats. It will even make a 14-in. wall, similarly stuccoed, so damp as to recommend renewal of the cement stucco with a special waterproofed rendering. Stone and concrete walls present their special problems, but it will be seen that Spinlove has done well in dealing with a brick one, and, under thoroughly bad conditions, secured that his client has a dry house.

SPINLOVE TO GRIGBLAY (PERSONAL)

Dear Mr. Grigblay, 13/3/26.

I have duly received your letter. I am aware that you always objected to the use of Riddoppo, and I also advised against it, so that Sir Leslie cannot very well hold us responsible. I certainly should say nothing on the subject unless Sir Leslie himself raised it.

I note what you say of wet in the chimney, and have written instructions today.

Yours truly,

The tone of this letter suggests that Spinlove resents the implication that he needs guidance, so that it is a pity his attempt to show he is not such a fool as Grigblay thinks should make it clear that he is a much bigger one. The issue does not, as Spinlove implies, turn upon Brash's holding the architect and the builder accountable, but upon whether the facts make them legally responsible ; and if Spinlove is going to address himself to the subject as though the point were open and debatable, he will be certain to prejudice his own and Grigblay's positions exactly as Grigblay fears, and lead Brash on to make claims which, though they may be untenable, will be likely to embroil everyone in the distresses preliminary to litigation. It will also be noticed that Spinlove brackets himself with Grigblay as though they were in the same boat. They are not. Their responsibilities are different.

SPINLOVE TO GRIGBLAY

Dear Sir, 13/3/26.

I note that the damp in chimney-breasts is due to rain driving into the stack, and shall be glad if you will treat the whole of the brickwork of all chimneys above roof with two coats of "Dessikex" damp-proofing, applied as directed by the manufacturers. I prefer this to treatment with soap. The work should be put in hand at once.

Yours faithfully,

A pound of soft soap in a bucket of boiling water allowed to stand overnight and sprayed freely on to brickwork with a garden syringe, is a reliable damp-proofing which Grigblay seems to have confidence in. Certain proprietary and much-advertis.d powders, which are effective in waterproofing the mortar or concrete in which they

are incorporated, are nothing but soap; and soft soap in the water will have much the same effect. In ordering "Dessikex," it is likely that Spinlove is buying treacle or soap or alum or salt at twenty times its value under a new name; but as the Wealth of the Nation appears to depend on the exploitation, at exorbitant prices, of common expedients under crack-jaw appellations, no doubt he is benefiting industry. As, however, Grigblay has had great experience of wet walls and Spinlove very little, it would have been wise for Spinlove to use what Grigblay h.. practical experience of, rather than what .. commended to him either by report or its own expensive brags.

SPINLOVE TO GRIGBLAY

Dear Sir, 15/3/26.

I do not understand why there has been such delay in rendering your final statement of account. You now send me a summary showing extras £1,500. I was totally unprepared for this, and can only suppose there is some mistake. Have you taken the provision for contingencies into account, and the saving on the provision for well-sinking and pump, for instance? A considerable part of the variations will come into a measured account which the Quantity Surveyor must deal with; and the value of that work has still to be ascertained. I shall be glad to have a rough summary of the variations account on which you base your claim. I must prepare Sir Leslie Brash for what is ahead as I am sure he has no idea that extras have mounted up in this way, and I have no knowledge of their ever having been ordered.

I enclose certificate for £2,500, which is as much as I feel entitled to certify at this time.

Yours faithfully,

We need have no doubt that Grigblay's estimate of extras is right; and when Spinlove says he is totally unprepared for such a figure he only tells us what we expected to hear. It is not surprising that he should lose touch with the account, as his careful contract arrangements were upset in various ways for which he was not responsible; but it is surprising that he should have remained unconscious of that fact. He ought to have been forewarned, and with greater experience he would have been: he ought also to have found opportunities to let his client know what was happening, but it is doubtful whether with greater experience he would have done so. When the interferences of the client, or adventitious circumstances, make hay of the careful safeguards of the conditions and of the detailed forethought of the drawings and specification, the whole position gets out of hand for the architect; and if the building-owner, after being informed of the results of interferences and alterations, persists in following his own devices; his architect cannot, without risk of impertinence, make any gesture of checking him.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 15/3/26.

Mr. Grigblay has asked for further certificate on account. This was due to him, on completion of the work, in February. I find he is entitled to the sum of £2,500, and have today sent him a certificate for that amount. This makes the total of certificates £18,000. The contract amount, as you know, is £18,440, but there will be the cost of extra work—garage, alteration to kitchen and other variations and additions and so forth—to add, which will, I am afraid, run into several hundred pounds. I am pressing the builder for his statement of account giving particulars of these extras.

Yours sincerely,

PS.—As this money was due to Mr. Grigblay more than a month ago, he will probably be glad of a cheque at once.

Spinlove's ideas of administering the gilded pill are raw, but promising. A degree of tact which trespasses on slyness may be forgiven on these painful occasions. The owner has to be informed of—and reconciled to paying—a bill of extras for which he is unprepared; and the easier the gradations by which the revolting intelligence is imparted to him the happier for him; and the happier for the builder; and the happier also for the architect, whose forethought for his employer's peace of mind is sometimes prompted by a care for his own.

Spinlove's postscript is due to Brash's habit, in the past, of holding back payments to the builder to the extreme limit fixed in the contract for honouring certificates.

GRIGBLAY TO SPINLOVE. (CONFIDENTIAL)

Dear Sir, 15/3/26.

In reply to your favour I take the liberty of writing to make clear, as there seems to be some confusion on the matter, that I painted with Riddoppo only on your statement that those were the orders of Sir Leslie Brash, and that he accepted responsibility for same; and I ask you to bear that fact in mind, as it is the position I take and hold to. I ought to have refused to touch the stuff, but I wished to oblige Sir Leslie so far as I was able; and as he would not take my advice he must settle the matter with the man whose advice he did take instead—and that, I suppose, is himself.

I write very frank and open, sir, because this is a serious matter for someone, if it isn't for me. It's not going to cost a hundred pounds, nor two hundred, nor yet three, with the cleaning of the stuff off the walls and joinery and the loss of going to a hotel—for they can't be expected to live in the house all those weeks it will be before it's done. Therefore, sir, I ask you to let Sir Leslie clearly understand that I have nothing more to say on this matter, as it will save a bit of trouble and be the best for everyone, including,

Yours truly,

GRIGBLAY TO SPINLOVE

Dear Sir, 16/3/26.

We have to acknowledge certificate for £2,500, which we have sent on to Sir Leslie Brash, and hope we shall receive his cheque per return, as it is a long time since we had anything on account and we were entitled to 40 per cent. more than this six weeks ago, which please note and oblige,

Yours faithfully,

This letter is curt to the point of being threatening. We have already seen that although Grigblay is lavish of good offices and kindly forethought, he is impatient of sloppiness. All he says is perfectly just, and Spinlove deserves to be told it. It is the architect's duty to see that the builder, as well as the client, gets his dues. Spinlove has shown no consciousness of his remissness in holding back the certificate for so long, and has not in any adequate way apologized to Grigblay for so disobliging him. He is, further, not entitled to withhold £1,000 on the plea of his ignorance of the state of the account. It is his duty to inform himself.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 18/3/26.

I have duly received your communication anent certificate and will conveniently arrange for cheque to be transmitted in due course. I cannot, however, accept responsibility for Mr. Grigblay's neglect to present his claim previously at an earlier date. I apprehend with satisfaction that these payments are now drawing to a final termination, but I am considerably astonished at your happy-go-lucky—if you will pardon the expression—intimation of additional extras running into the total amount of *several hundreds of pounds*. I am aware that accumulated additional extras have accrued, but the exact anticipated total of the figure of my eventual liability is a matter of more importance to me than you appear to divine; and though a matter of half a dozen hundred pounds one way or the other may seem of insignificant importance to you, it is, I may inform you, of *considerable importance to me*. I desire that you will be so good as to transmit the exact figure forthwith and also clearly intimate to Mr. Grigblay that the accountancy is in your hands and that I am not prepared to acquiesce in any inflated extortions. Surely it does not lie in Mr. Grigblay's decision to decide what additional extras he shall demand?

I have re-perused your communication to Lady Brash anent the surveyor's certificate of sanitary efficiency, a second time. Are you *confident* of your conviction that our sanitary provisions are entirely without blemish? In the concluding passage terminating your letter you surmise the possibility of a defect in the arrangements having eventuated subsequently to the previous tests. This I apprehend to be a matter for further imperative investigation.

Yours sincerely,

Brash's avoidance of the low word "drain" marks a refinement that is rare.

SPINLOVE TO GRIGBLAY (PRIVATE)

Dear Mr. Grigblay, 18/3/26.

I perfectly understand the position you take and it has my approval. I myself shall most certainly refuse to accept responsibility for Riddoppo.

Yours truly,

Spinlove's assurance will, again, increase Grigblay's doubts. The disparity may be subtle but it is vital. The point is not what action Grigblay may in future take, but what his position, in fact, now is. Spinlove's approval or disapproval cannot alter those facts, and Grigblay is in no way concerned with it. It is clear, also, that Spinlove does not understand his own position; and Grigblay must have little confidence that he will not allow Brash to believe he has a claim against both of them.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 20/3/26.

The delay with the certificate was not Mr. Grigblay's fault. He made his claim before the money was due, and in setting the matter aside I overlooked it. I should be obliged, therefore, if you will regard the certificate as dated February 10th, which is the day it fell due.

I cannot yet say what the total of the account is, as much detailed measuring and pricing, and checking of the daywork accounts and merchants' vouchers, etc., is necessary in order to arrive at it. Grigblay will render an account which it will be necessary for me to check and certify. The actual "accountancy"—as you term it—will be done by the Quantity Surveyor, who ranks as auditor in ascertaining the exact sums due in respect of work which I find to be properly authenticated as extras. I shall hope, however, to be able to give you an approximate statement in the course of a week or two.

I can assure you that the drains are all right. It is inconceivable that they have developed any defects since they were tested.

I have discovered the cause of damp over the attic fireplaces, and have told Grigblay to put this right at once.

Yours sincerely,

PS.—Will you please return the surveyor's certificate?

Spinlove has laid out the mechanism of settling builders' accounts, so that Brash will have a right idea of it, quite neatly.

He is, however, too emphatic in his pride of drain. The development of defects in Honeywood drains is not inconceivable. We heard of a clay subsoil when the cellars were dug, and the movements of clay in response to changes of temperature and humidity may lead to early cracking of cement pipe-joints which would cause failure under the water test; and the heavy lorries already referred to may have done similar damage. Such defects, however, do not ordinarily lead to insanitary drainage, as the conditions of the tests, which exact perfection, do not arise in use; and if by accident they did arise, the amount of pollution of the subsoil would be insignificant.

GRIGBLAY TO SPINLOVE

Dear Sir, 22/3/26.

We note your instructions *re* waterproofing to chimneys. Our price for this work, which includes the necessary ladders and scaffolding, is £42 12s. We will use "Dessikex" if you wish, but we happen to know what this stuff is made of, and we should prefer to apply two coats of either Sorrellming or Flutate, both of which are colourless and can, in our experience, be relied on. The work, however, cannot be put in hand till the summer as, whatever we use, the brickwork must be quite dry and ought to be warm when the application is made.

Yours faithfully,

[NEXT WEEK: IV.—MORE NEWS OF THE DRAINS.]

QUESTIONS THAT ARISE

Ancient Lights

P. L. writes: "*Clients of mine wish to erect a building upon land adjoining a house. The house and land are divided by a passage 3 feet wide, which is common property and a right-of-way to back gardens. The house has four windows that are ancient lights; it has also a dining-room with four windows overlooking this passage, which are not ancient lights. Can they claim any privilege for these windows? Do the original ancient lights create a precedence in favour of the new windows?*"

It appears from the facts before me that a dining-room containing four windows has been erected recently as a wing to a house, which house has rooms that have a prescriptive right to light, commonly called "ancient lights."

I am asked to express an opinion as to whether the windows in the dining-room have, in the circumstances above mentioned, a prescriptive right to light by virtue of the fact that the other windows in the house are so protected.

The right to light is a right, apart from an agreement between the owners of adjoining properties, acquired for a window in a dwelling-house after the window has been in position for nineteen years and one day (Prescription Act, 1832). Once this right has been established, the owner may have a right of action if it is infringed. The right does not confer upon the owner an absolute right to an unlimited amount of light, but only to a reasonable amount of light for ordinary domestic purposes. If a structure is erected which diminishes the light to a window which has "ancient lights," it is not actionable unless the plaintiff can prove that the amount of light which is left is insufficient for ordinary domestic purposes. (*Colls* v. *Home and Colonial Stores* (1904) A.C. 179.)

The Court has refused to lay down an absolute standard; each case must be judged on its own merits. The 45 deg. rule is a useful guide, but the Court has refused to fetter itself.

In this case, however, the right to light for the windows in the dining-room has not been acquired under the Prescription Act, so that your client will, in the absence of an agreement to the contrary, be entitled to blot out entirely all light to these windows, notwithstanding the fact that in the exercise of his legal rights he acts from improper motives, or causes great damage and hardship to the owner of the house containing these windows (see *Mayor of Bradford* v. *Pickles* (1895) A.C. 587).

As to whether an agreement is in existence is a matter of fact upon which I have no information before me, so that I am unable to express a final opinion upon the question before me.

E. F. I.

Sash Windows

"Interested" writes: "*Is the familiar sash window an English invention or was it introduced with other Renaissance features from abroad? Elizabethan buildings seem to have stone mullions and casements, but with the pure classic forms of the eighteenth century they give place to sashes, as in the Banqueting Hall in Whitehall by Inigo Jones.*"

The example of Inigo Jones's Banqueting Hall is, unfortunately, no guide to the use of sash windows, as they were a later alteration. Old prints show the windows with centre mullions and transomes. The sash window was probably introduced into this country from Holland at the time of William and Mary. The palace at Loo in that country had sash windows throughout. Sash windows are shown in the designs of Daniel Marat, the architect of

William III, in 1712, and in the England of Queen Anne they were popular. Early sash windows often had no weights and were propped open by sticks, the lower sash only being movable.

Sash windows have never become popular in France, and in 1699 de Lorge had one specially made from an English model for his house at Montmartre, but in Scotland Dr. Johnson found that they had become usual in spite of the strong French influence in that country. Early sash windows can be distinguished from later examples by the thickness of the glazing bars; those in the "Wren" period are often nearly 2 ins. wide, but by 1790 they had shrunk to mere threads, to vanish entirely before the advent of plate glass.

LL. E. W.

Church Repairs

"Architect" writes: "*I have been asked by a churchwarden to prepare plans for altering the pews and repairing the stone chancel floor in a parish church. There are, I am told, certain formalities in the Church of England with which an architect has to comply. Do these affect the building?*"

The formalities to which your correspondent refers are simple and are dealt with by the Secretary of the Parish Church Council.

The architect prepares his scheme, and submits to the Council, if it is approved, a copy of the plan, with an outline specification, which is forwarded to a body called the Diocesan Advisory Board. This Board is comprised of a number of clergy, ecclesiologists and architects, and its duty is to see that the proposed work does not damage or deface objects of interest. It also has power to veto anything in bad taste or out of keeping with the church. When the plan is returned approved, it is then forwarded with the necessary documents to the Diocesan Registrar, with the request for the grant of a "faculty."

The Registrar orders a notice to be placed in a conspicuous position in the church stating the nature of the proposed work, and any objections by parishioners must be made before a certain date.

In your correspondent's case there are not likely to be any objectors, and in due course, on payment by the Church Council of the usual fee, the faculty will be granted.

In this particular case the red tape may appear annoying, but the effect of these safeguards has preserved much old work in remote districts, which would otherwise have been destroyed by ignorant parsons and churchwardens.

A. F. W.

Cracks in Partitions

C. H. B. writes: "*I recently inspected a new building where the plastered partitions (hollow terra-cotta blocks) to the upper floor were cracked along the line of a joint for the whole length of the partitions under the main steel beams. The crack shows on both sides of the partitions. It is not at the joint between the beams and the top of partitions, but at the next joint below. The roof is covered with asphalt and the floor is of steel-concrete construction.*

"*I had the plaster cut out for the whole length for a width of 6 inches, canvas fixed to the partition, and the work made good in Keene's cement, but the cracks are appearing again. Several of the rooms contain some very delicate instruments, and, other than the unsightly appearance, it is important that the plaster which crumbles around the cracks should be effectively made good. What is the reason for this defect, and is there a possible cure?*"

I have had similar trouble to that experienced by "C. H. B." on some new work. I found that the fracture was caused through the expansion and contraction of the steel roof beams.

I specified that the partitions were to be pinned tightly to floors and ceilings, and this was faithfully carried out by the builder, resulting in a stronger joint against the beam casings than to the joints below.

The trouble would have been avoided if an expansion joint had been left between the top of the partitions and beams, covered with a wood fillet.

Despite the expense, if a thoroughly satisfactory job is required I would remove the top course of blocks and rebuild, leaving an expansion joint.

W. A. D.

Advertisement Hoardings

A. J. T. writes: "*A firm of billposters has erected a large hoarding in a field opposite to my house, shutting out my view of the river. The hoarding is some 30 ft. back from the road, and I understand a rent is paid to the farmer on whose field it has been put up. Is there any possibility of getting this eyesore removed?*"

Unsightly hoardings can be removed under the Advertisements Regulation Acts, 1907 and 1928. These Acts do not themselves prohibit advertisements, but they authorize local authorities to make bye-laws. The county form of bye-law, which applies to the whole county, except boroughs and urban districts with a population of over 10,000, reads as follows:

"No person shall erect or exhibit or permit or cause to be erected or exhibited any advertisement so as to disfigure or injuriously affect the view of rural scenery from a highway or railway."

All county councils in England, except two, have taken action under either one or other of these Acts. The earlier Act only protects "the amenities of a public park or pleasure promenade" or the "natural beauty of a landscape," but the scope of the 1928 Act is wider and more county councils have brought their bye-laws up to date.

The Acts are in operation and only need enforcing, and it is for your correspondent to put pressure on the council to take action or to institute proceedings himself—since any member of the public who suffers by the breach of a bye-law is entitled to proceed against the offender.

S. C. A.

Asphalt Covering for Roof

"Spec" writes: "*I am specifying an asphalt covering for a new concrete flat roof; on one side I am carrying the asphalt down a sloping portion of the roof, pitched at 60°. I propose including for fixing a lead strip at the angle between the top of the slope and the flat roof, between the two layers of asphalt. It seems to me that if the asphalt should creep there would be a tendency for the asphalt to crack at this joint, and that the lead would strengthen this angle. Would this be a safeguard?*"

Your correspondent seems to have the mistaken view that there would be a joint at the junction of the flat and sloping roof. This would not be so, as the work would be executed in one operation.

By fixing a lead strip, as he suggests, he would only invite cracks, owing to the expansion of the lead.

I recently observed a failure in connection with this type of work, where a lead apron had been fixed between the layers of asphalt and dressed into a gutter.

Instead of finishing the asphalt just over the apron with a splay at roof level, it had been turned down almost into the gutter, resulting in a series of cracks at the bend over the lead.

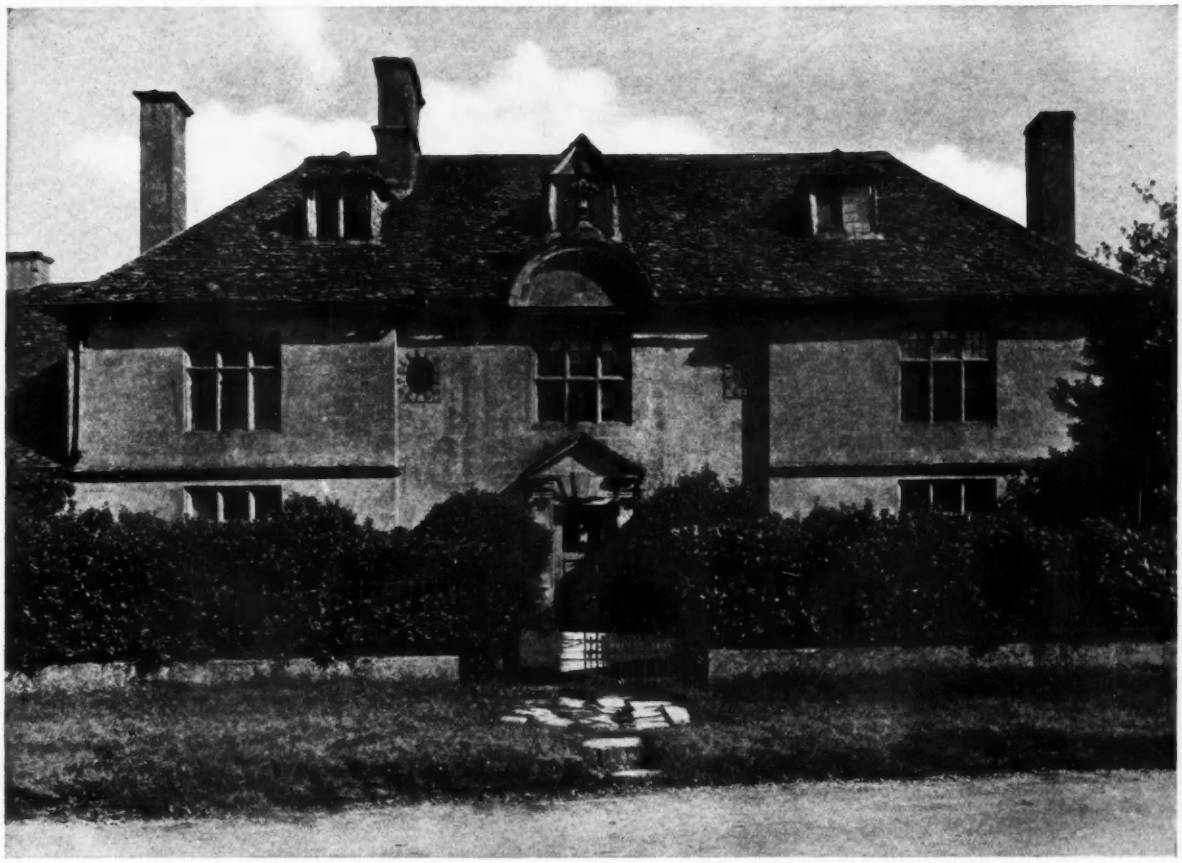
It is true in this case that the lead is slightly exposed, but even with about ⅜-in. cover of asphalt the heat would tend to expand the lead.

I am sure if "Spec" employed a specialist firm of asphalters for this work, they would protest against the inclusion of this strip.

H. A. C

Mr. Alfred Spice, of Granard Road. Wandsworth Common, S.W., architect, left £6,557 (net personalty £5,503).

Mr. Harry P. Adams, F.R.I.B.A., of Knightsbridge, left £44,910 (net personalty £40,250).



The home of the Medford family at Mickleton, Gloucestershire : a study in symmetrical tradition.

ENGLISH PRECEDENT No. 119

MEDFORD HOUSE, MICKLETON, GLOUCESTERSHIRE

The house is built for the most part of Campden stone, but, in or about 1699, Samuel Medford made additions, in the classical style, to the original fabric. These took the form of an extension to the north end (an indication of which is seen on the left of the photograph), and the south end was constructed in brick, no doubt at this time.

The stone mullioned windows have the traditional details. The lunettes light powdering closets, and as the powdered wig did not reach general use until the middle years of Queen Anne's reign, they are probably additions.

[THOMAS FALCONER]



A near view of the vase surmounting the hood, situated at eaves level, immediately above the main entrance doorway.

LETTERS FROM READERS

The Economics of Steel

SIR,—If you, sir, wanted to build a ship, you could go and buy a little book of rules and formulæ; and if you observed those rules and made no mistakes in your additions you would have an A1 ship which could enter any port and carry any cargo; for the science of using steel for ships is an exact science. Or if, distrusting ships, you preferred to bridge Brooklyn Harbour or the Brahmaputra, you could buy another little book of rules and formulæ, and if you used the same care, any railway in the world would entrust its wagons to your bridge, and people of all nations would walk contentedly over it; for the science of using steel for bridges is an exact science. But if, sir, more modest, you wanted a garage for your little car—that is different. You cannot go and buy a little book because there is no little book to buy; for the science of using steel for garages has not so far developed as to command universal acceptance.

So, deprived of your little book, you come to me and ask me to design a garage for you in steel. First, you must tell me where you live; because what in Whychester passes for a sturdy structure the citizens of Howminster regard as a flimsy menace to their safety. With my special knowledge of these things, I will guide you; for I know that Jones, who surveys in Howminster, was born in Fiji, and he sees to it that the buildings under his care are so designed that they will safely withstand such typhoons as that which once ravaged the city of his birth. But if you would have your garage in Whychester, it will be quite a different affair; for Brown, surveyor, is Whychester born and bred: of typhoons he recks nothing; centre of gravity is his watchword and eccentricity his nightmare. We will design accordingly.

It is said that in America they arrange things differently. I have heard that in that country you could buy a little book, and that, armed with that book, you could design a garage which would be permitted in any town. How dull! The Americans say that because they have standard building rules they can get their buildings so cheaply and so quickly. Of course they can—but at what a sacrifice! If you had wanted your garage in America you would have got it quickly, you would have got it cheaply, but you would have lost that feeling of glorious adventure, of launching out upon uncharted seas. We should have sacrificed those long, friendly chats with Jones or Brown upon questions of principle and questions of detail, upon questions of theory and questions of practice. You and I would have missed those intimate discussions as to whether it would not be better, after all, to sell your car; and, sir, worst of all, I should not have had the chance of meeting you.

Let us see to it that our Kavanaghs do not conspire to rob us of our pretty, mediæval customs.

N. L. ANDERSON

Electric Transmission Towers

SIR,—I beg to call your attention to an illustration from a book entitled *The Face of the Land*, which appeared in THE ARCHITECTS' JOURNAL for May 7.

This illustration purports to be a view of the towers and cables of the electric supply grid traversing an open tract of country, and underneath is printed "when we come to scenery such as that of the South Downs or Lakes we are entitled to ask whether it is not grotesque folly to mar such national heritages for the sake of uniformity." This illustration is a reproduction of the faked photograph which appeared in the press last autumn, when an agitation was on foot to prevent the Grid passing along the back of the South Downs.

I would ask, on the other hand, whether it is not "grotesque folly" on the part of those who are anxious to preserve the beauty of the English countryside to avail themselves of misrepresentation of facts. As shown in this illustration, the towers appear to consist of clumsy wooden posts and braces, instead of being, as they are, constructed in steel of the lightest possible design, and the cables, which are represented as sagging in a deplorable manner, are shown of the thickness of an elephant's leg, though as was pointed out by Mr. Rowlinson in the JOURNAL of May 21, their actual diameter is about $\frac{1}{2}$ in. to $\frac{3}{4}$ in. I have seen several of these transmission lines in different parts of the country, and the actual fact is that the cables are invisible, and the towers when seen against a background of hill or woodland are hardly noticeable at all.

A good cause is being injured by excessive sentimentalism and reiterated cries of "Wolf!" The supply of cheap electricity all over the country, which is the object of the grid, is absolutely essential to the future prosperity of this country, and the method of transmission, which has been arrived at after most careful and anxious consideration by the best technical experts, must be accepted, however much one may yearn for the England of a hundred years ago. Personally, I am convinced that the form of tower which has been adopted does the least possible injury to the landscape and has a quality of its own. I venture to say that elements of beauty and romance are to be found in these lines of towers striding over hill and dale, if only one has the vision to see them, if only one can readjust one's intellectual focus to the inevitable conditions of changing civilization.

(SIR) REGINALD BLOMFIELD

Specialized Materials

SIR,—"A manufacturer of specialized building products is entitled to fair play for his material. The architect would do well, therefore, to assure himself that the instructions issued by the manufacturer have, in fact, been faithfully followed."

To read such sentences (page 836 of THE ARCHITECTS' JOURNAL for May 28) made the sun shine just a little more brightly, made the routine of the day a little less stereotyped, endowing it with more keenness and enjoyment than it sometimes seems to possess.

I wonder how many architects realize what heart-burnings we commercial folk have over the scepticism with which some building operatives meet the suggestion that entirely new methods be employed? It is heart-breaking, sometimes, to see a carefully-manufactured, high-grade product, the result of years of infinite research and long and close attention to field results, used in a manner that not only invites, but ensures, ultimate dissatisfaction. The architect can so easily help us—those of us who *service* our products; those who will spare no effort nor expense to teach, explain, guide and demonstrate with patience born of some psychological experience. Believe me, we are bound to approach such educational work with no little philosophy and forbearance.

If our guidance of the work is at the instance of the architect himself, after he has done *his* share by properly specifying the manner of procedure *before* the subsequently accepted tender for the work was first submitted, we are on firm ground. When the operative says: "It's all very well to ask me to proceed thus and so *now*, in a way which I never before heard described. I did not *bid* to do that. Why wasn't I told I should have to do it *before* I put in a price?"—is he not entitled to a modicum of sympathy?

Only by just such normal, sane, easily effected co-operation as that suggested by the golden words of the two sentences quoted, can the full value offered by a live, modern manufacturer be realized and obtained.

Our cry is: "Help us that we in turn may help."

FREDERICK COLEMAN

THE SPECIFICATION WRITER

Warming the Water in a Private Swimming Bath

THE building of a private swimming bath does not come every day to the domestic architect. When Braddell and I were instructed to devise a scheme, we approached the subject with very fresh minds. There were several matters of detail to be learned from observation or from the kindly advice of those who had had experience, but on the vital question of heating the water there was an ominous lack of unanimity of opinion as to the success of the various methods hitherto adopted.

For our purpose it seemed most desirable to obtain a system which would heat the bath in a few hours and which would, moreover, bring the water to a more or less uniform temperature. I discussed the problem with Mr. E. E. Pope, the heating engineer, of Reading, who approached it with an equally fresh mind.

In a few days he produced a complete new scheme in outline.

Briefly, this was to run four flow pipes, two to each side of the bath, one above the other, with small inlet jets taken off each flow and through the bath wall at spaces of six inches; and then to take four return pipes, equally spaced in the floor, with a similar number of tube outlets connected to them. The flow jets were below the water level of the bath, and these and the outlets were $\frac{3}{8}$ in. diam.

At first sight this seemed somewhat alarming, meaning as it did in our case some 228 inlets and 228 outlets to the bath. On the other hand, examine it as I would, I could find no possible reason why it should fail to work. Nevertheless, it was with a feeling of some trepidation that I decided to adopt the system. Luckily there was some time, while the foundation work was in progress, to consider and perfect the details.

To start with, we realized that the small outlets in the bottom of the bath might get choked with sediment. The return pipes were, therefore, carried through both ends with cleaning eyes, so that they could be cleaned with rods. Though probably unnecessary, the same was done with the flow pipes.

The jets and outlets were cut off flush with the lining of the bath and reamered back about $\frac{1}{32}$ in. behind the face. The ends of these pipes were incorporated in a decorative scheme so that they are almost invisible. The size of the main flow and return pipes was, of course, regulated by the size of the bath, and the distance apart of the small jets and corresponding outlets was governed by its width. It was decided to do all the work inside the walls and floor of the bath in copper.

The system was designed to heat, in our case, 30,000 gallons of water from 40 degrees to 78 degrees in six hours. Mr. Pope recommended a sectional boiler capable of about $1\frac{1}{2}$ million B.T.U.'s to obtain this result, and we decided that the boiler should be oil fired.

The water to the bath is filtered before entering, and when the bath is in use it is being slowly but constantly changed by opening a valve from the feed tank.

It was, of course, necessary to cap all the ends of the inlets and outlets during the construction and finishing of the bath to keep the small pipes clear; it was, therefore, impossible to test the system at all until the absolute completion of the decorations. The day came at last when the caps could be removed and the bath filled.

At the first test, somewhat naturally, the principal aims were : 1 : to show that the bath could be heated at all, and 2 : to see how quickly it could be done. The result left no doubt on the first point, but in the endeavour to speed up the operation the temperature got much too high, reaching about 100 degrees in the bath in six hours. We realized at once that it would be necessary to regulate the flame of the burner lower than the thermostat could be set to.

At the second test, therefore, we set the burner by hand to keep the boiler temperature between 96 to 100 degrees. The result this time was satisfactory beyond our hopes. In four hours, starting from cold, the temperature at the top of the bath was 78 degrees and at the bottom 74 degrees. Moreover, there was no point at the top of the bath where the temperature varied more than $\frac{1}{2}$ degree, and at the bottom it was completely uniform all over.

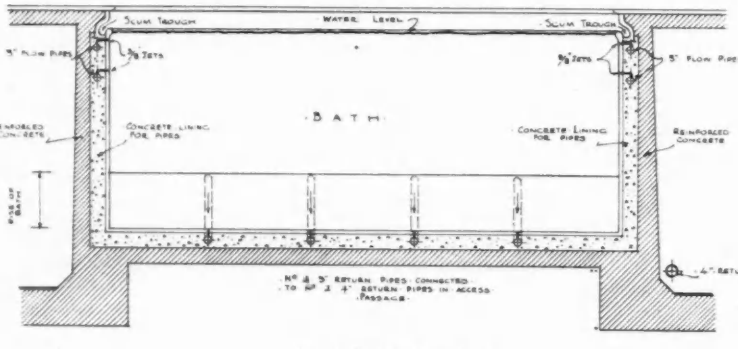
The results attained are briefly : 1 : the great speed with which the bath can be heated ready for use; 2 : the excellent natural circulation which gives a uniform temperature without resource to electrical or other acceleration; and 3 : the great saving in fuel, not only in heating the bath in the first instance but in keeping it going over a long period.

An actual test proved that after the four hours necessary to heat the water in the first instance, the burner could be turned out, and in the twelve hours from 8 p.m. to 8 a.m. the temperature in the bath dropped only four degrees.

The two accompanying diagrams illustrate the system which Mr. Pope has now patented. In constructing the walls of the bath the reinforcement was set up, the piping was then run and secured in position, and the concrete was then filled in in one thickness.

HUMPHRY DEANE

MOST important modifications in the law governing the positions of water-closets, etc., in buildings in London are foreshadowed in the minutes of a recent meeting of the London County Council. Hitherto it has been obligatory that sanitary conveniences should be situated on an external wall of the building. That requirement is likely to be rescinded, subject to certain provisions as to



CROSS SECTION THRO BATH

The illustrations reproduced on this and the facing page are of cross and longitudinal sections of the private swimming bath referred to in the article by Humphry Deane, and show the arrangement of pipes and jets for heating the water on the novel system described in the text.

lighting, ventilation, etc. The proposed amendment would have a far-reaching effect on the planning of new buildings and the reconstruction of old ones. The text of the recommendation in the report of the L.C.C. Central Public Health Committee, which was moved, put and agreed to, is printed below :—

BYLAWS AS TO WATER-CLOSETS, ETC.

FOR some time past consideration has been given to the question of the revision of the bylaws made under section 39 (1) of the Public Health (London) Act, 1891, and section 24 of the London County Council (General Powers) Act, 1928, with respect to water-closets, urinals, etc.

In preparing revised bylaws regard has been had to suggestions submitted by the metropolitan borough councils and technical associations and to experience of the working of the existing bylaws. Their order of arrangement has been varied, particular requirements have been classified under distinct headings, and many minor alterations, variations and additions have been made so as to give a clearer presentment of the requirements. Important additions have been made dealing with the position, construction, lighting and ventilation of water-closets and the position and construction of urinal apartments, the latter being included under the powers conferred by section 24 of the L.C.C. (General Powers) Act, 1928.

Two provisions in the bylaws call for special comment :

(1) *Water-closets not on an external wall.*—A proviso to bylaw 2 (1) permits a water-closet to be so situated that none of its sides is an external wall and that an open space need not be provided if means of artificial lighting and a system of mechanical ventilation are furnished to such water-closet. Difficulties have, owing to site limitations, been experienced in Central London in providing for the construction of water-closets in both existing buildings and buildings in course of erection in a position having an external wall abutting upon an open space as at present required, with the result that such conveniences have, in many instances, been provided in a manner not in strict compliance with the bylaws. As the aim of the bylaws in this connection is to secure sufficient natural lighting and adequate ventilation, it was considered that, while the principles laid down by the current requirements should be adhered to where the character of the site reasonably provides for compliance, provision should also be made for sites and conditions where compliance is difficult and may be impracticable, so long as the convenience can be so lighted and ventilated as to allow for maintenance in a sanitary state.

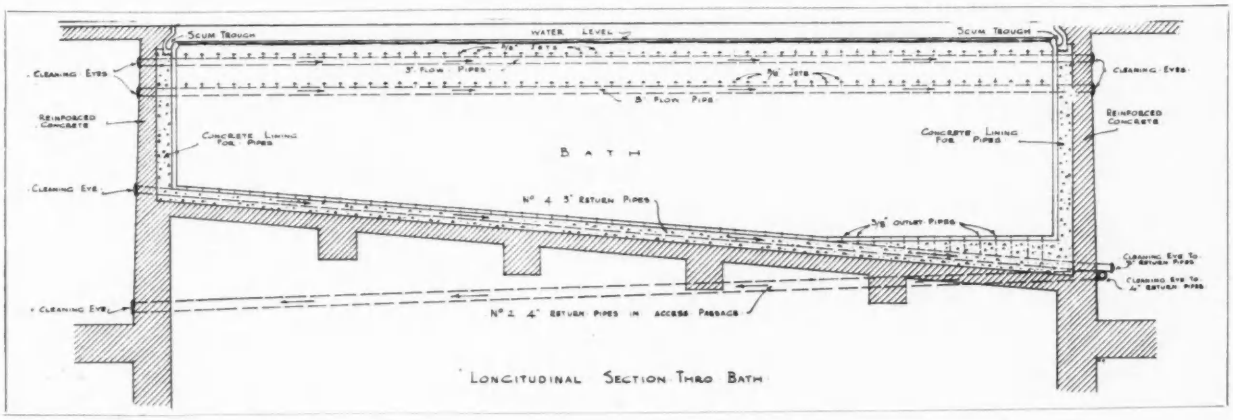
With the next appearance of the Specification Writer department (i.e. THE ARCHITECTS' JOURNAL *for June 25) it is hoped to include notes upon the new method of writing specifications, classifying the work to be done by its locality in the building rather than by the trades involved, a departure that is engaging the increasing attention of architects.*

Comments received from certain metropolitan borough councils and technical associations disclosed objection, on principle, to the construction of water-closets without means of natural lighting and ventilation. To meet the objection it was proposed to provide for the metropolitan borough councils to exercise their statutory discretion in giving or withholding consent to the construction of a water-closet so situate as not to have an external wall and an abutting open space, but in informal discussion of the matter with officers of the Ministry of Health it was ascertained that the proposal would not be likely to be acceptable to the Minister. As the form of construction envisaged will in all likelihood be limited to a type of building where the expense of installing mechanical ventilating appliances would be justified and would not become a general practice, the proposal was not pressed and the position, under the revised bylaws in their present form, will be that any person will be able to construct in any premises a water-closet not having an external wall and an abutting open space provided that suitable means of artificial lighting and a system of mechanical ventilation are furnished thereto.

(2) *Flushing of urinals.*—To meet objections raised by the Metropolitan Water Board to bylaw 3 (2) (*b*) (iii) and (iv), the flushing period, while a urinal is in use or available for use, was increased from twenty minutes, in the first draft of the revised bylaws, to twenty-five minutes, and a footnote was included, directing attention to the Board's regulations as to maximum flush and alterations to fittings, but the Board was not satisfied and contended that the requirement was likely to lead to waste of water. The requirement is in our opinion reasonable and necessary to ensure, in ordinary cases, maintenance of a urinal fitment in a sanitary state.

The draft revised bylaws have been submitted informally to the Minister of Health and he has suggested certain minor textual alterations, which we are advised may be accepted, subject to some consequential alterations. At the present stage the Minister expresses no opinion on the proposal that urinals shall be fitted with an automatic flushing apparatus. If the Metropolitan Water Board still wish to question the bylaw referred to under (2) above, when the draft bylaws are advertised, their objection will be considered then. Subject to this, the Minister is willing to confirm the bylaws when the statutory requirements have been complied with. We recommend

That bylaws be made by the Council under section 39 (1) of the Public Health (London) Act, 1891, and section 24 of the London County Council (General Powers) Act, 1928, with respect to water-closets, urinals, etc.

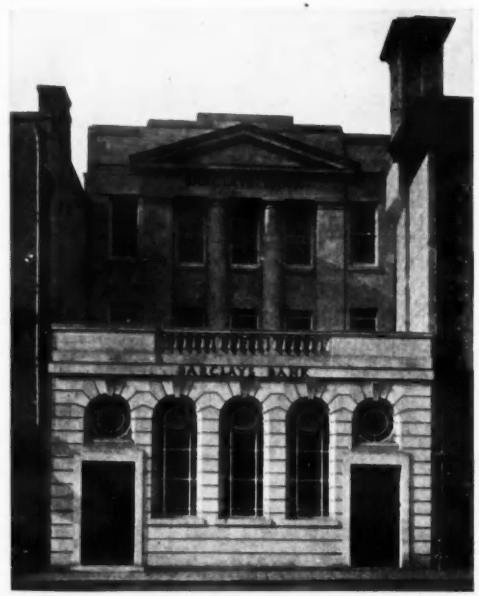




BRIDGNORTH : Refronted with local hand-made bricks. The plinth and doorway are in grey Alveley stone ; the cornice is of wood. The roof and dormers are retained from the old building.



STECHFORD : Faced with Hollington stone and Leicester sand stock bricks. Roof, green slates. A flat is provided for the manager.



STAFFORD : This building, of Hollington stone, is designed so that the ground floor can be set back in line with the upper stories when the street improvement scheme is carried out. Metal windows are fitted.



COVENTRY : Faced with similar materials as Stechford, above.

BRANCH BANKS *for* BARCLAYS

ON this and the facing page are illustrated eleven branch banks, erected recently in the Midland counties. Those at Bridgnorth and Newcastle-under-Lyme were remodelling schemes, necessitating considerable alterations in the interiors, refacing the exteriors, and the retention of the old roofs. With the exception of these and of Bedworth, in which parts of an old building were retained, the banks illustrated are new.



SOLIHULL : Walls, multicoloured bricks ; roof, Bridgwater tiles.

Stafford design, above. trated are new.

SOLIHULL : Walls, multicoloured bricks ; roof, Bridgwater tiles.

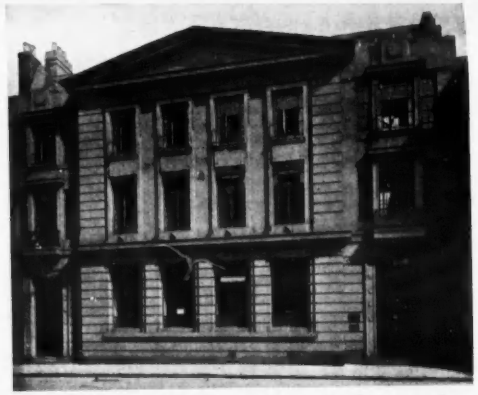


HALL GREEN, Birmingham : Leicester sand stock brick walls, with Darley Dale stone dressings.

DESIGNED BY



MOSELEY : Also faced with sand stock bricks and Darley Dale stone. The three deep metal windows give a family resemblance to the Stafford design.



COVENTRY : In stone, with each of the two doorways emphasized by an iron balcony on the first floor.

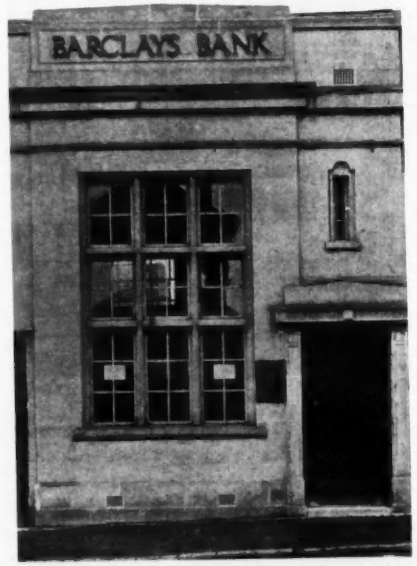
PEACOCK AND BEWLAY



NEWCASTLE-UNDER-LYME : An alteration in which the roof and certain old walls are retained. Exterior, Hollington stone.



KING'S NORTON : A new branch bank erected in an important suburb of Birmingham. It comprises the banking premises and a residence for the manager. The exterior is of Darley Dale stone. The interior fittings are of oak.



BEDWORTH : In adapting these premises a passageway and a considerable portion of the old building had to be retained.

IN PARLIAMENT

[BY OUR PARLIAMENTARY REPRESENTATIVE]

Hadrian's Wall

REASSURING information as to the future of Hadrian's Wall was given in the House of Commons last week by the First Commissioner of Works. In reply to questions put by Mr. Denman and Mr. West Russell, Mr. Lansbury said that the Government had given the question of the proposed quarrying near Hadrian's Wall their most careful attention and had come to the conclusion that, if the quarrying could be confined to a limited area, the result would be that no serious harm would be done, and the way would be left open for the preservation of the surroundings of the remaining stretch of the wall. Negotiations would proceed with this end in view. He would like to emphasize the fact that neither the wall nor the *vallum* was in any danger of being actually touched or damaged by the quarrying operations. At the same time, hon. members would be glad to know that a Bill was in course of preparation which would give his Department adequate powers to protect the surroundings of ancient monuments, including, of course, the Roman wall.

Charing Cross Bridge Scheme

Asked by Major Nathan to state the present position in regard to the Charing Cross Bridge scheme, Mr. Morrison, the Minister of Transport, said that the question of the promotion of a scheme for the construction of a new bridge was a matter which fell primarily to be dealt with by the London County Council as the bridge authority. He understood that the London County Council, at their meeting on June 3, decided not to take any action with a view to recommitting the Charing Cross Bridge Bill, but to appoint a Committee representative of all the interests concerned. Until he had had an opportunity of fully considering the matter, he would not be in a position to make any statement.

Existing Building Regulations

Mr. Arthur Michael Samuel asked the Minister of Health whether he would request the National Physical Laboratory and the Building Research Station to embark upon an investigation with the specific object of enabling them to advise, on their own initiative, local authorities as to how such authorities could advantageously eliminate rules and practices from existing building regulations which did not take into adequate consideration modern improvements in building materials and methods, and were consequently hindering employment in the building and co-operant trades.

Miss Susan Lawrence, who replied, said that the question which Mr. Samuel raised was, in London, for the London County Council. Elsewhere, the by-laws referred to had been in recent years subjected to a process of reconsideration with reference to modern improvements in building materials and methods. The Building Research Station was engaged on continuous and systematic investigation into building materials and structure.

Hyde Park as an Air Port

Mr. Sanders asked Mr. Lansbury, First Commissioner of Works, whether he had under consideration the question of permitting a certain portion of Hyde Park to be used as an air port.

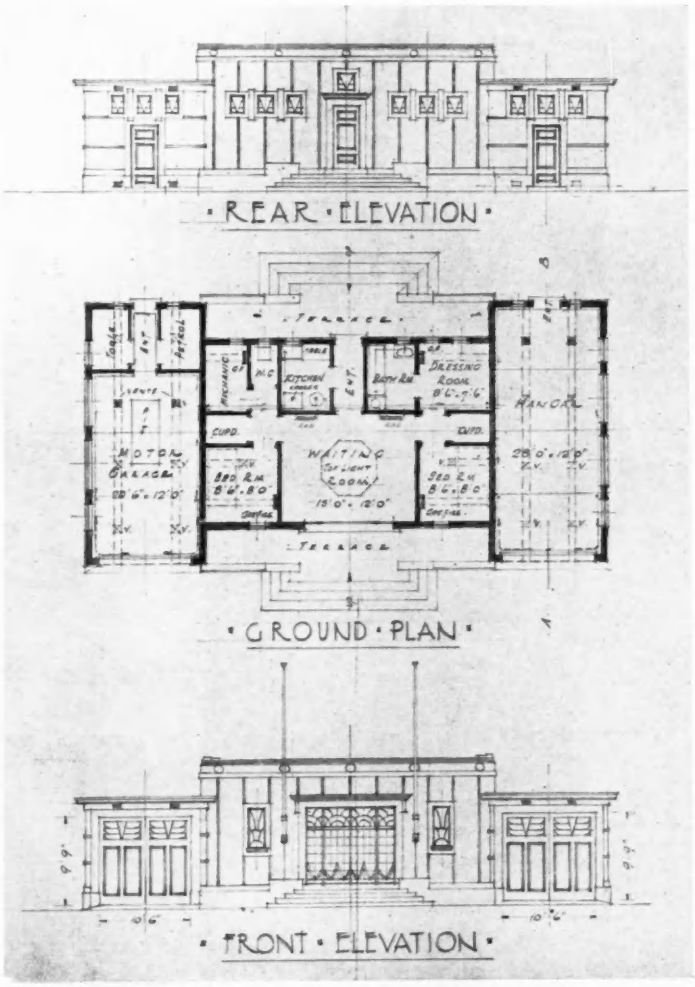
Mr. Lansbury in reply said he had seen the reports in the newspapers, but the matter had not otherwise been brought to the notice of his Department. The only statement he could make was that he had no intention of giving countenance to any such project.

The Channel Tunnel

Asked by Sir Austen Chamberlain whether he had any statement to make regarding the Channel Tunnel, Mr. MacDonald said his report would be circulated as a White Paper. He stated that the decision of the Government would be found to be against the Tunnel.

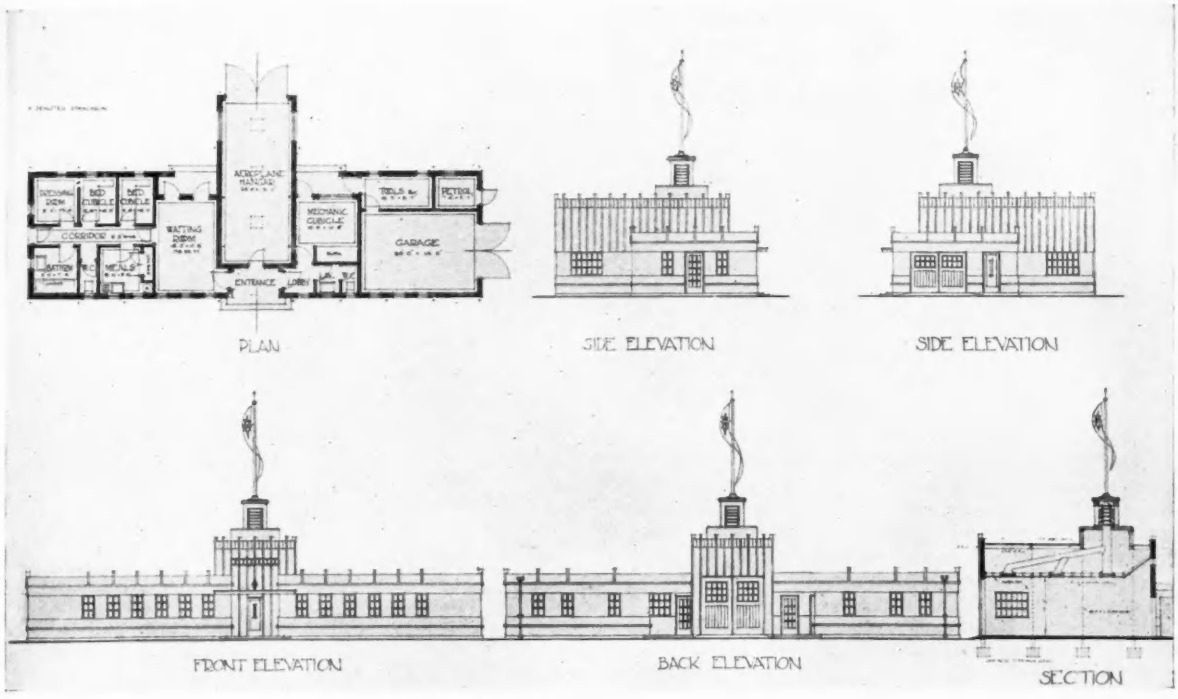
The Government's Slum Bill

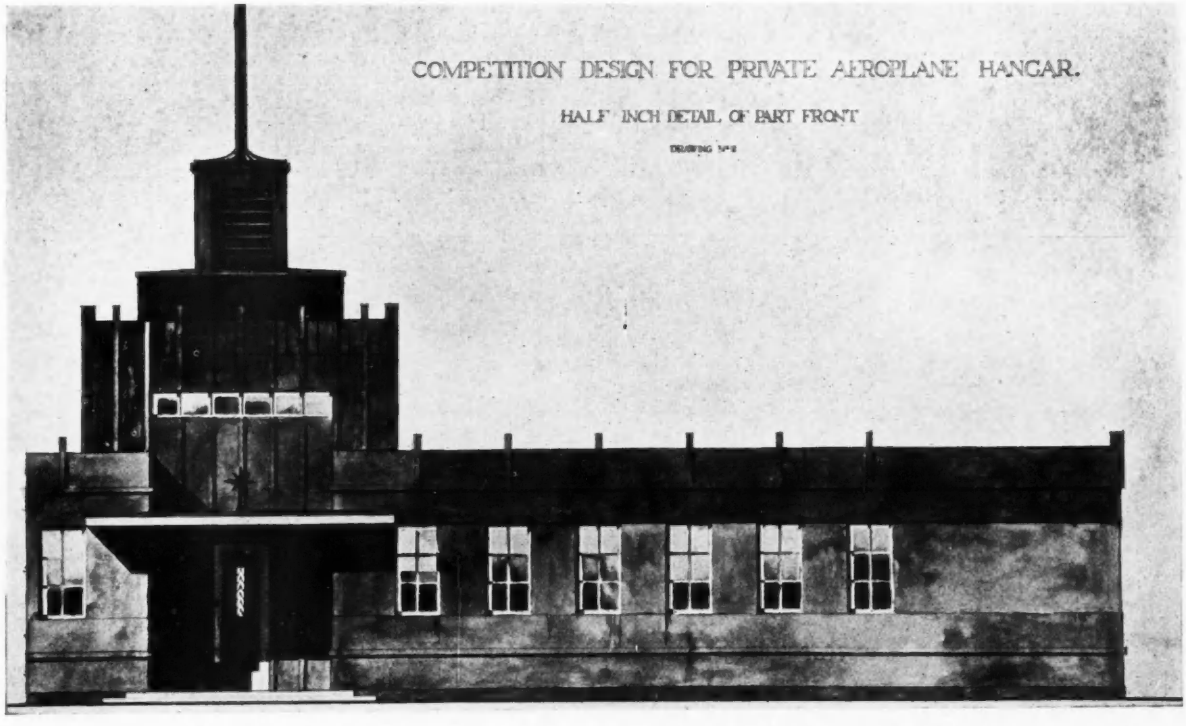
Despite lengthy sittings of Standing Committee "A," the Government's Bill dealing with slum clearance continues to make but slow progress. The Bill is unlikely to pass into law until well on to the end of the session.



Competition promoted by the Association of Architects, Surveyors and Technical Assistants for a Lock-up Hangar for an Aerodrome. First Premiated Design, Class A. By W. Brooke. The winning design, Class B, is illustrated on the facing page.

PRIVATE LOCK-UP HANGAR FOR AN AERODROME





Competition promoted by the Association of Architects, Surveyors and Technical Assistants for a lock-up Hangar for an Aerodrome. First Premiated Design, Class B. By J. W. Davidson. The competition was arranged in conjunction with Ewart and Son, Ltd., and assessed by W. T. Hamlyn and Chas. McLachlan. It was divided into two classes, for those over and under twenty-five years of age, and the prizes cover free places in the A.A.S.T.A. party to Madrid in September, including second-class rail and steamboat travel throughout and all hotel expenses, except personal expenses. The drawings will be exhibited at the R.I.B.A., 9 Conduit Street, W., on June 14, between 11 a.m. and 3 p.m.

LITERATURE

MOULDINGS OF THE TUDOR PERIOD

THIS portfolio is no mere picture book of architectural subjects, such as those with which the market has been flooded during the last few years, but a serious working record of well-chosen examples drawn from many counties. Primarily, it consists of full-size details of mouldings, but these are connected and made intelligible by small (⅜-in.) scale drawings of the objects with dimensions figured in. Its chronology (although no dates are given) extends from the early-sixteenth to the mid-seventeenth centuries, and covers Late Tudor, Elizabethan and Jacobean works. The authors have shown wise discrimination in confining themselves to ordinary domestic examples. These are infinitely better types of native work than pretentious and magnificent creations found in the houses of great folk, which, generally, were gross in conception and clumsy in execution. Indeed, except for occasional exceptions, it will be found that ordinary design, which was current at any period, represents the best design of that period.

The authors show appreciation of curves, avoiding that elementary but common blunder of supposing that every moulding of the ovolo type is necessarily a quarter of a circle. As they have not committed themselves by showing the centres from which their curves are struck, it is reasonable to conclude that they were drawn free-hand by their designers and should not be represented as compass-struck.

Amongst the mouldings drawn are those from windows, panelling, fireplaces, external and internal doors, stairs and beams.

The sections of window mouldings are well chosen and present considerable variety, including all the principal types. The ovolo moulding from Scole, plate one, has additional members within the glass line and, as carried out, must present an extremely satisfactory effect. That from Exeter, on the same plate, has cavetto and ovolo separated by fillets on one side of the glass line, but on the other side has two ovolos, similarly divided, thereby violating that good rule of not placing two convex or two concave mouldings together. However, craftsmen in the sixteenth century constantly departed from general practice and yet produced entirely satisfactory results. The moulding from Norwich on plate one is of earlier character, and whereas on one side of the glass line it has an ogee, finishing with a sharp quirk at the fillet and continued with a shallow hollow, it has a simple splay outside the glass. The mullion from Hereford, on plate four, is rich in rounds, hollows and ogee curves, and these on one side of the glass are smaller and more varied than upon the other side. The mullion from Glastonbury is from a stone window, and is almost symmetrical, with hollow chamfers within and without, of characteristic early-sixteenth-century form.

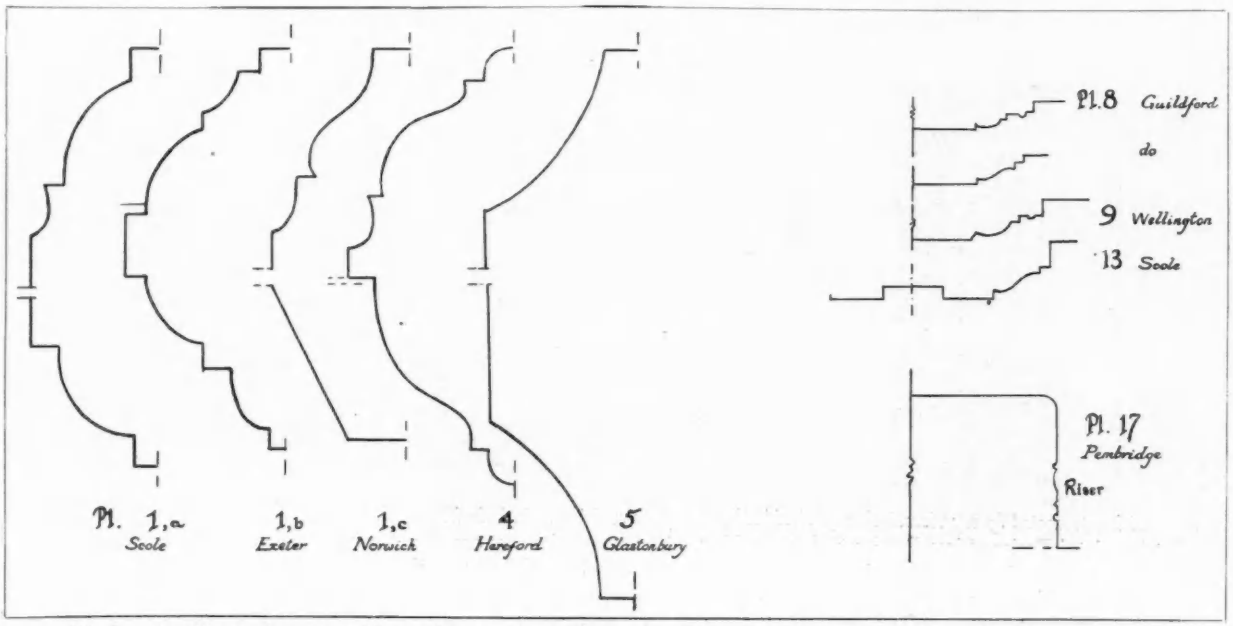
Of sixteenth- and seventeenth-century panel moulds an infinite variety exist, yet one finds the same mould repeated in examples from counties which lie far apart. Two from Guildford, on plate eight, show variations found in the same piece of panelling. That from Wellington, Somerset, on plate nine, differs little from one at Guildford; but that from a door at Scole, plate thirteen, is channelled down the centre, a detail one often finds in late-sixteenth-century stone windows and in woodwork.

The sections of fireplaces and doorways are valuable records, the importance of which is much enhanced where, as in many instances, sections of the door-moulds accompany the latter, for often a designer may have difficulty in finding authority for door sections, which few measurers note.

The details of stairs, naturally, display sections of handrails and strings, both of which are important and useful. On plate seventeen there is a full size of a delicate and charming moulding from the face of a riser—an unusual but delightful feature.

Another detail, seldom rendered, is the beam mould, of which a dozen or so examples are given.

Probably this is the most important work of its kind that has been published since Hurrell's *Old Oak English Furniture* in 1902. As a book of reference and inspiration, it should prove valuable. If it should induce those who acquire it to measure other examples themselves, to arrange them comparatively and to strive, by comparison, to detect the principles upon which the craftsmen concerned worked, the knowledge acquired will certainly prove invaluable. It is not to be



Window, panelling and stair mouldings selected and reduced from the full-scale plates in Mouldings of the Tudor Period.

expected that this is to be learned in the schools—it is one of those things which a man must find out for himself, and when he has found it he can never produce those travesties of sixteenth-century design which, so wittily, have been branded (by Mr. H. Chalton Bradshaw, I believe) as "Jacobethan."

NATHANIEL LLOYD

Mouldings of the Tudor Period. By Tunstall Small and Christopher Woodbridge. London: The Architectural Press. Price 8s. 6d. net (postage 9d.).

RUBBER FLOORING

THE failure of adhesion in certain cases of rubber floor coverings led the International Rubber Association to carry out a series of experimental tests. The result of these investigations has been published, and their thoroughness may be judged from the fact that the English edition of the report comprises some 150 pages, and is likely to remain the standard book on the subject for a considerable time. Tests were carried out on the rubber material itself, the various forms of adhesives, and on the composition of the flooring, the results showing that it is necessary to consider all these together when deciding the suitability of laying this type of floor covering.

Good rubber flooring, whether in sheets or tiles, should be smooth, non-porous, and when bent double for a period of six hours, should not break or crack. A too soft rubber floor will not adhere as well as a harder one, but on the other hand, a too hard floor will not deaden sound.

Of the many adhesives tested, the ordinary rubber solution in benzine was found to give the most satisfactory result when stuck to wood flooring. Resin cement also gave satisfactory results as long as the floor was dry, but the adhesion failed in the presence of damp more easily than in the case of the rubber solution, which held until the wood was saturated. With magnesite flooring, rubber was again the most satisfactory solution, especially when the filler was sawdust; but this particular type of sub-flooring is probably more used in shipbuilding than in architecture.

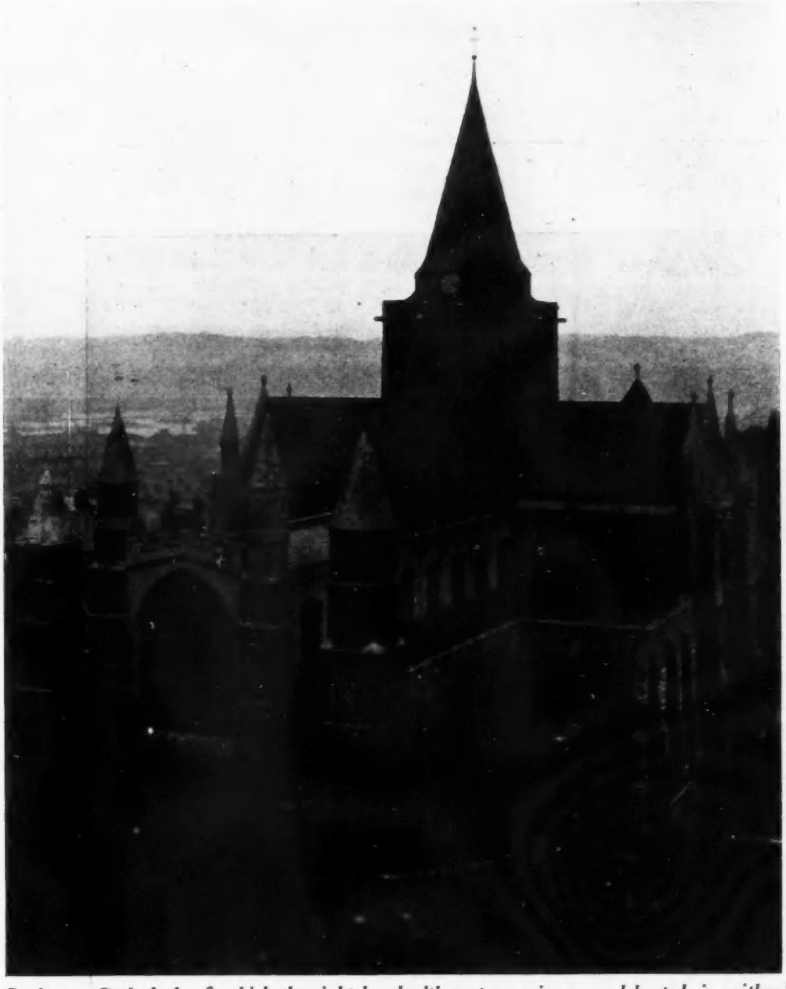
The tests carried out on concrete floors, which are the most common in practice, give some interesting results. Rubber solution adheres to a screed when the proportion of cement to sand is large, and the report suggests that this should never be less than 1 cement to $2\frac{1}{2}$ sand. Damp will weaken the adhesion of rubber solution, and render useless resin cement by the liberation of any free lime in the concrete. An existing floor which is permanently damp is unsuitable for rubber covering.

The experiments showed that the weakness lay rather in the composition of the concrete surface than in the adhesive, and further tests were undertaken to find a more suitable screed. The most satisfactory result was obtained by using a screed of 1 cement to $1\frac{3}{4}$ coarse sawdust well mixed dry, and with only sufficient water added later to form the material into a paste. When dry, the surface skin of cement was removed by scouring before applying the adhesive in the case of rubber solution. With this mastic the adhesion is unaffected by the presence of dampness. The laboratory test was so successful that large-scale tests have been carried out in Holland with satisfactory results.

The report recommends the use of resin cement as an adhesive on concrete floors that are bone dry and likely to remain so for laying rubber tiling, as it allows the tiles to be laid slightly away from their final position and pushed up over the cement, which ensures the edges between the tiles being flushed up with the cement and made waterproof. This cannot be done with rubber solution, which renders the tile immovable the moment it is laid. The report concludes with chapters on specification and method, which will prove a valuable guide to architects and prevent disappointment when laying this type of floor.

LL. E. WILLIAMS

Adhesion Problems in connection with Rubber Flooring. Report of the Rubber Flooring Research Committee of the International Rubber Association. The Hague, 1930.



Rochester Cathedral, of which the eight-hundredth centenary is now celebrated, is neither large nor imposing, and its spire is definitely ugly. On the other hand, the west front, damaged as it is by additions, is a fine piece of expressive architecture, the aisle walls coming through at their real value, to the advantage of the fine flanking towers.

Publications Received

Journal of the National Association of Heating, Ventilating and Domestic Engineering Employers. Issued by the Council of the Association, 12 Russell Square, W.C.1.

International Housing and Town Planning Bulletin. May, 1930. International Federation for Housing and Town Planning, 25 Bedford Row, London, W.C.1.

TWO LONDON SHOPFRONTS

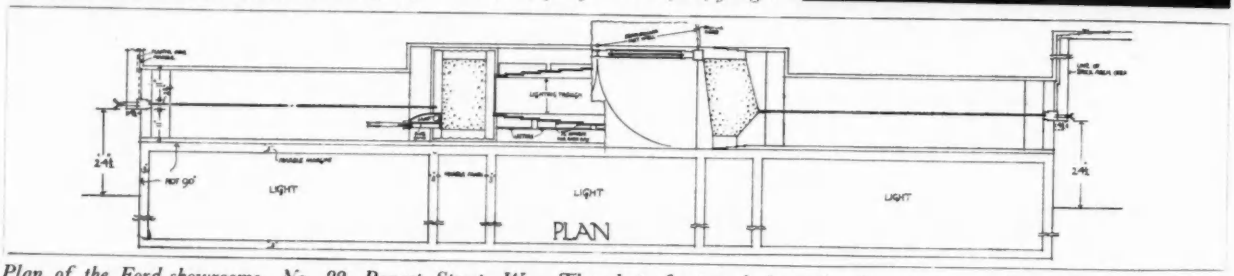
THE two shop fronts illustrated on this page are reproduced from the June issue of *The Architectural Review*. That in Regent Street, erected for the display of Ford cars, has a main showroom two stories in height, with an interior colour scheme in silver and gold. The other, in Victoria Street, has been carried out in stainless steel, without enrichment other than the lettering and the luminous cornice.



The Ford Showrooms, Regent Street, W., by day.



The Ford Showrooms, Regent Street, W., by night



Plan of the Ford showrooms, No. 88 Regent Street, W. The shop front and the main showrooms are the work of Gerald A. Brown, in collaboration with the architects, Charles Heathcote and Sons. The main showroom is two stories in height.



[*From* The Architectural Review.

Shop front for Messrs. Allen-Liversidge, Ltd., Victoria Street, S.W. Designed by Joseph Emberton.

LAW REPORTS

REFLECTED LIGHT : IMPORTANT JUDGMENT

Goldberg and another v. *Waite and Waite. Chancery Division. Before Mr. Justice Bennett*

THIS was an action by Mrs. Yetta Goldberg, the freeholder, and Sydney Bacons Pictures, Ltd., lessees, of 108 Great Russell Street, W.C., against Messrs. Waite and Waite, architects, to recover damages for alleged illegal obstruction of ancient lights.

The defendants denied that there had been any interference with plaintiffs' rights, or that they had suffered any damage.

Mr. Swords, K.C., and Mr. Belsher appeared for the plaintiffs, and the Hon. Stafford Cripps, K.C., and Mr. A. C. Nesbitt, for the defendants.

Mr. Swords said that the second plaintiff held a lease of 108 Great Russell Street from Mrs. Goldberg for twenty-one years from 1926, and that the defendants were the owners of premises at the rear which had been until 1927 the garden of 15 Caroline Street. On the other side of the garden was a large block of flats known as Bedford Court Mansions. There was a large recess in the Mansions over which, until defendants' building was put up, the back windows of the plaintiffs' premises obtained a fair amount of direct light. Apart from the recess, there was a certain amount of diffused light from the wall of the Mansions. The defendants said that the plaintiffs had no right to this reflected light, but if that were so it made it all the more important that the direct light should not be interfered with. The plaintiffs complained that the light enjoyed through the window in the back door, the ground-floor back-room window, the staircase window, and the first-floor back-room window, had been so materially diminished by the defendants' building as to constitute a nuisance and an illegal obstruction of their ancient lights.

Mr. Percy John Waldram, the daylight illumination expert, of 9 Gray's Inn Square, gave evidence for the plaintiffs. He said the two back rooms had been only sufficiently lighted before the defendants' new building was erected, and that they were distinctly inadequately illuminated now. With regard to the effect on the value of the plaintiffs' premises, he said there was a reduction in the normal rental value of the ground-floor room of at least £15 a year, and of the first-floor room of £10 a year. It was difficult to arrive at exact figures for the reason that when the other side of Great Russell Street was built up it might well be that reasonable lessees would not look at the rooms at any price. He put the letting value of the ground-floor back room in 1926 at £65, and of the first-floor back room at £50, and the reductions in value owing to the defendants' building down to £50 and £40, respectively. He would say that the staircase was now gloomy, but not dangerous. Disregarding the staircase and capitalizing the loss over sixteen years, the loss on the capital value of the premises was £400.

Cross-examined : He advised that the plaintiffs' chief claim was with respect to reflected light.

Mr. Cripps : Knowing that reflected light in the circumstances was not something to which they had a right?

Mr. Waldram said he could not hold an opinion on a point of law. He was hoping that that would be a point of law which would now be settled by this case. He only advised on the facts of the case.

Mr. Percy Vivian Burnett, of Messrs. Burnett and Eprile, chartered architects, of Jermyn Street, acting on behalf of the plaintiffs, said his firm wrote the defendants that they were of opinion that the proposed building would diminish the direct light to the back rooms, basement and ground and first floors of 108 Great Russell Street very seriously, and that it would deprive the windows of a considerable amount of light reflected from the side walls of Bedford Court Mansions. He gave evidence as to the loss of light to plaintiffs' building by the defendants' structure.

Mr. James Townsend Green, of Messrs. Weatherall and Green, also gave evidence in support of the plaintiffs' case.

Mr. Nesbitt, for the defendants, said he hoped to prove that the plaintiffs had not suffered any loss of direct light or, alternatively, that there was such a trivial diminution as would not justify the award of damages.

Mr. H. W. Hendry, F.R.I.B.A., of Messrs. Henry and Schooling, said he was employed to direct the erection of the new buildings. He said there was some doubt as to the inadequacy of the lighting on the ground floor of plaintiffs' premises. But the first floor was adequately lighted.

Cross-examined : He said that reflected light would make some difference, but not between adequate and inadequate light.

Mr. John Swarbrick, chartered architect and surveyor, of Maddox Street, W., described the case as the most trivial he had ever heard of.

Mr. C. J. Coade, of Messrs. Coade, Son, and Burgin, of Southampton Row, expressed the opinion that the loss of rent and loss of light was negligible, and too trivial to take any notice of.

Mr. Cripps, for the defendants, submitted that plaintiffs must prove that defendants were responsible for something which amounted to a nuisance, and even if it were, they had to prove that the light which was left after the erection of the defendants' building was sensibly less than before. The Court must look at the surrounding circumstances of the case, and here it was obvious that the substantial diminution of light in plaintiffs' rooms was caused by the construction of the Bedford Court Mansions thirty years ago. The mere addition of the insignificant obstruction by the defendants' building did not amount to a nuisance. Assuming there had been a diminution of light, the evidence showed that that which had been taken away was reflected and not direct light.

Mr. Swords replied.

His lordship, in giving judgment, said the plaintiffs made a claim in respect of two windows of rooms used for clerical purposes. These windows originally overlooked the former garden of 15 Caroline Street. About May, 1927, the defendants began building on the site and garden of Caroline Street. Questions were then raised as to the light to the windows in question. The extent to which Bedford Court Mansions obstructed the direct light had been fully put forward during the hearing. There was no question at all about that. Light came to the windows of plaintiffs' rooms as reflected light from Bedford Court Mansions. A plane tree had stood in the Caroline Street garden in front of the plaintiffs' windows. This had been cut down. But he was not satisfied that the plane tree had interfered to any substantial extent with the access of the light to the rooms. Defendants had now erected a building of which the plaintiffs complained.

THE SKETCH CLUB

Here are two points that sketchers, whether confessed or furtive, are advised not to overlook. One is that last week's issue contained full particulars of the Holiday Sketches Competition promoted by THE ARCHITECTS' JOURNAL*; and these are summarized on advertisement page xlvi of this issue. Secondly, the fifth session of the Sketch Club, due June 18, coinciding with the R.I.B.A. Conference at Norwich, sketches made in that city and in the county of Norfolk will then be shown.*

This building was nearer plaintiffs' windows than Bedford Court Mansions. Defendants' building had put an obstruction between plaintiffs' building and the wall of the Mansions from which the rooms derived their light. Before the defendants' building was erected, the rooms in question were reasonably well-lighted. The result of the defendants' building was to deprive the plaintiffs' two rooms of a substantial quantity of light. He was satisfied that the amount of light which the plaintiffs had been deprived of was such that the plaintiffs were entitled to complain on the ground that a nuisance existed. The letting value had been diminished to a capitalized amount of £225.

The question now was whether the defendants were liable in damages to the plaintiff in that sum. Plaintiffs had failed to satisfy him that any nuisance existed by the obstruction of light coming from the sky. That which had brought about the diminution of light was the interference with the light that was reflected from the Mansions before the defendants' building was erected.

There was no authority that reflected light could be acquired by prescription. His lordship did not propose to decide for the first time that an easement for reflected light could be acquired under the Prescription Act. Under the circumstances, plaintiffs having failed on this point he dismissed the action with costs.

GOOD AND SUFFICIENT REPAIR AT END OF LEASE

G.M.S. Syndicate, Ltd. v. *Kearsley and another. Chancery Division. Before Mr. Justice Clauson*

IN this case the G.M.S. Syndicate of Great James Street, Bedford Row, sought as against the defendants, John H. Kearsley and Walter G. Bell, the determination of certain boundaries, and claimed damages for alleged breach of covenant and interference with a wall.

By their defence the defendants denied the allegations of the plaintiffs.

Mr. L. Cohen, K.C., for the plaintiffs, said his clients sued as owners of the reversion of certain premises in Kentish Town Road which were held under a lease for ninety-three years from March, 1836. The lease contained a covenant that the premises should be delivered back at the end of the term in "good and sufficient repair." The plaintiffs' case was that the defendants and their predecessors in title had in breach of their obligations failed to preserve the proper boundaries of the property and to deliver up the demised premises distinct from other land. The demised premises in 1875 were vested in a Mr. Fox, the freeholder of the adjacent land, and it was alleged that that gentleman had demolished the buildings and destroyed the boundary wall between his freehold land and the demised premises, and erected shops, part of which were said to be on the land demised, on which stood the wall. There was also a complaint that the drainage system had all been made one, to the detriment of the plaintiffs' property.

Mr. Preston, K.C., for defendants, said his clients' construction was that the alleged boundary wall was a party wall. They denied that the wall was on the plaintiffs' land or that they had confounded the boundary. They denied that the plaintiffs' property originally had a good and sufficient surface drainage. His case was that the premises, had been yielded up in the same condition as they were in immediately prior to the execution of the lease.

His lordship, after hearing a mass of evidence, said he held as a fact that the wall was in fact built so as to bound the two properties and so as to have its western face along the boundary line. The wall was now represented by a west wall of the three houses which had been subsequently built, and he granted a declaration to that effect.

Defendants, on the substantial point in the action, had succeeded, and he accordingly ordered plaintiffs to pay the defendants' costs, except in so far as they had been increased by the claim for waste through the alleged alteration of the character of the property.

Punch Summer Number

THE summer number of *Punch* is lavishly illustrated both in colour and in black-and-white.

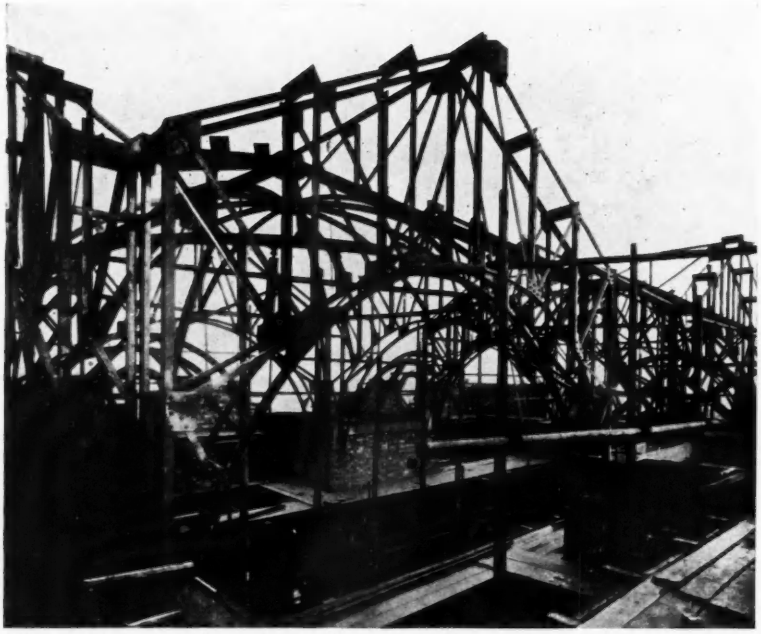
Raven Hill's picture of an Oriental guide in the tropics placing two tourists "eggsackly on de equator," and Arthur Watts's "Beauty Doctor," will attract attention, as will also the picture by George Morrow showing how "Little Willie Jones, with a bent pin, won the first prize in the Annual Sea-fishing Competition at Paddle-beach Pier," and those by Wallis Mills telling how a couple who were bored to tears by the sun-baked crowds at European resorts went in search of new seaboards only to find the coasts of Africa and the South Sea Islands equally and even more unpleasantly crowded. H. M. Bateman's "The Man who paid off his Overdraft" is a gem.

Punch. Summer Number. Price 1s.

COMPETITIONS OPEN

June 14.—The Chelmsford Corporation invites architects to submit designs in competition for a new public library in accordance with conditions drawn up by H. V. Lanchester, F.R.I.B.A., who will act as assessor. Applications for conditions and a plan of the site should be made to G. E. Barford, Town Clerk, Chelmsford. Deposit £1 1s. Latest date for submission of designs: June 14.

June 14.—The Corporation of Kingston-upon-Thames invites qualified architects to submit competitive designs for the erection of public baths. Assessor: J. Ernest Franck, F.R.I.B.A. Premiums: £300, £200, £100 and £50. Particulars, etc., obtainable from A. W.



The steel framework of the Church of Our Lady of Mercy and St. Thomas of Canterbury, Gorton, Manchester. (*See also pages 891-4.*) *It is the work of Robinson and Kershaw.*

Forsdike, Town Clerk, Town Clerk's Office, Kingston-upon-Thames. Deposit £1 1s. Latest date for submission of designs: June 14.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thomas, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor: H. V. Ashley, F.R.I.B.A. Premiums: £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs: July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall, which is to be built on the site of the old town hall at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

July 31.—The Dudley Education Authority invites architects having an office within a radius of fifteen miles of Dudley to submit competitive designs for a Council school to accommodate 320 children, to be erected on the Brewery Fields estate; also a school for 400 children on the Priory estate. Assessor: Herbert T. Buckland, F.R.I.B.A. Premiums: £150, £100, and £50. Applications for conditions of the competition, etc., should have been made to J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley, by April 30. Deposit £1 1s. Latest date for submission of designs: July 31.

September 1.—The Bangor (Co. Down) Borough Council invites architects or town planners to submit designs in competition for laying out the sea front within the Borough. Assessor: Professor Patrick Abercrombie, F.R.I.B.A. Premiums: £150 and £50 for first and second places, respectively. Copies of the conditions and plans will be forwarded on application to J. Milliken, Town Clerk, Borough Council Offices, Bangor, Co. Down. Deposit £1 1s. Latest date for submission of designs: September 1.

No date.—The Carlisle Corporation invites British architects to submit designs for the façade to English Street and the Victoria Viaduct, suitable for shops and business premises. The site was previously occupied by the Prison. The total length of the frontage is approximately 358 ft. Assessor: Francis Jones, F.R.I.B.A. Premiums: £300, £200, and £100. Particulars of the competition, etc., may be obtained from Percy Dalton, A.M.INST.C.E., A.R.I.B.A., City Engineer, 18 Fisher Street, Carlisle. Deposit, £1 1s.

No date.—The General Syndicate, Ltd., invites architects to submit competitive schemes for the development of a site at Liverpool, fronting St. John's Lane, Queen Square and Rose Street. Premiums: £250, £100 and £50, for first, second and third prizes, respectively. Particulars, etc., are obtainable on application to the Secretary, the General Building Syndicate, Ltd., 36 St. Martin's Lane, W.C.2.

THE ARCHITECTS' DIARY

THURSDAY, JUNE 12

LONDON SOCIETY, Lancaster House, St. James's S.W.1. International Exhibition of Modern Commercial Architecture. Until June 30.

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition open to the public. **10 a.m.**

BLACKPOOL AND FYLDE ARCHITECTURAL SOCIETY. At the Grundy Art Gallery, Blackpool. Exhibition of R.I.B.A. Prize Drawings. 10 a.m. to 7 p.m. Until June 12. **10 a.m.**

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, Victoria Embankment, W.C.2. Annual Conversazione, to be held at the Natural History Museum, South Kensington, S.W.7.

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. At Inverness. Annual Scottish District Meeting. 3 p.m. Until June 14. At Belfast. Meeting of the Northern Irish District Branch. **3 p.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art, held in the North Court. 10 a.m. to 6 p.m. (Thursdays, 10 a.m. to 10 p.m.) **10 a.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

SATURDAY, JUNE 14

Sunrise, 4.43 a.m. Sunset, 9.18 p.m.

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND. Gloucestershire Branch. At the Town Hall, Cheltenham. Conference under the chairmanship of Major-General Sir Fabian Ware, K.C.V.O., K.B.E. 11 a.m. Opening address by the Mayor of Cheltenham, followed by "Regional and Town Planning," by Captain J. H. Trye, C.B.E., R.N. Discussion on the subject to be opened by G. L. Pepler. 12.45 p.m.: Lunch. Afternoon Session, 2 p.m.–4 p.m.: "The Traditional Building of the Cotswold and surrounding Stone Districts." By H. Stratton Davis, F.R.I.B.A.; and "Modern Building and the Use of New Materials," by Thomas Falconer, F.R.I.B.A., followed by discussions to be opened by Sir Philip Stott, Bart., and J. W. Robertson Scott, respectively. **11 a.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to the William Booth Memorial Training College, Denmark Hill, S.E.5. Meet at the College at 2 p.m. **2 p.m.**

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 26 Buckingham Gate, S.W.1. Annual General Meeting at 9 Conduit Street, W.1. 3.30 p.m. Annual Dinner (and Dance) at the Florence Restaurant, Rupert Street, W. 6.45 for 7 p.m. **3.30 p.m.**

CHELMSFORD PUBLIC LIBRARY COMPETITION. Latest date for submission of designs.

KINGSTON-UPON-THAMES PUBLIC BATHS COMPETITION. Latest date for submission of designs.

MONDAY, JUNE 16

R.I.B.A., 9 Conduit Street, W.1. Election of Council and Standing Committees: Election of Members. **8 p.m.**

TUESDAY, JUNE 17

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to the Innholders' Hall, College Street, E.C.4. Meet at the Hall at 3 p.m. **3 p.m.**

WEDNESDAY, JUNE 18

R.I.B.A., 9 Conduit Street, W.1. British Architects' Conference, to be held at Norwich. Until June 21 inclusive. The headquarters of the Conference will be at the Stuart Hall, where an informal reception will be held during the hours 8 p.m. to 11 p.m.

THURSDAY, JUNE 19

R.I.B.A. British Architects' Conference. At the Stuart Hall, Norwich. The president will deliver the inaugural address, followed by "Regional Planning, with Special Reference to Norwich and Norfolk," by W. Harding Thompson, F.R.I.B.A., at 10.15 a.m. Lunch, 1 p.m. Assemble at St. Andrew's Hall, where Conference photograph will be taken. 2 p.m. Alternative visits during afternoon. Reception by the Lord and Lady Mayoress, at the Castle Museum, at 8 p.m. **10.15 a.m.**

FRIDAY, JUNE 20

R.I.B.A. British Architects' Conference. At Norwich. Alternative whole-day visits. Conference Banquet at St. Andrew's Hall. 7.15 p.m. for 7.30 p.m.

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "Landscape Road Designs, with Special Reference to Recent Work in the U.S.A." By Thomas Adams, F.S.I., M.T.P.I. The Rt. Hon. Lord Ponsonby will preside. **5 p.m.**

SATURDAY, JUNE 21

Sunrise, 4.42 a.m. Sunset, 9.21 p.m.

R.I.B.A. British Architects' Conference. At Norwich. Informal visits. 9.45 a.m. to 1 p.m. **9.45 a.m.**

ROYAL SANITARY INSTITUTE. Annual Congress to be held at Margate until June 28 inclusive. Various lectures, discussions and visits will be held throughout the week.

MONDAY, JUNE 23

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Westminster Abbey. Meet in the Jerusalem Chamber at 4 p.m., where Dr. Foxley Norris will address those present. **4 p.m.**

TOWN PLANNING INSTITUTE. At the Institution of Mechanical Engineers, Storey's Gate, St. James's Park, S.W.1. General Meeting. "Why Not More Progress with Town Planning?" By Professor Patrick Geddes, M.T.P.I. **6 p.m.**

WEDNESDAY, JUNE 25

R.I.B.A., 9 Conduit Street, W.1. Special General Meeting. "The Restoration of St. Paul's Cathedral." By Captain C. Stanley Peach, F.R.I.B.A., and W. G. Allen, F.R.I.B.A. (Lantern illustrations.) Also, the opening of an exhibition of models, masonry specimens, drawings and photographs. Until June 28. 10 a.m. till 8 p.m. (Saturdays, 5 p.m.) **10 a.m.**

ROYAL SANITARY INSTITUTE. At Margate. Meetings of the Architectural and Engineering Sections. **10 a.m.**

FRIDAY, JUNE 27

LONDON SOCIETY, Lancaster House, St. James's S.W.1. Visits to Deaf and Dumb Asylum, 179 Clapton Road, Hackney, and St. John's Institute Hackney. Meet at the first-named place at 2.45 p.m. Tea will be provided at St. John's Institute. **2.45 p.m.**

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL SOCIETY, The Castle, Winchester. Excursion to the Joinery Works of Messrs. W. E. Chivers and Sons, Ltd., Devizes, and buildings of architectural interest in the neighbourhood. A General Meeting will be held after lunch.

SATURDAY, JUNE 28

Sunrise, 4.45 a.m. Sunset, 9.21 p.m.

WEDNESDAY, JULY 2

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION. Annual Exhibition to be held at Portsmouth until July 8.

FRIDAY, JULY 4

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Joint Meeting with the Hampshire and Isle of Wight Architectural Association. Visits to the new Town Hall (description by E. Berry Webber), the Old Bargate (description by H. P. Cart de Lafontaine), Guildhall, Empire Theatre, and Ocean Liners. Particulars are obtainable from the Hon. Secretary.

SATURDAY, JULY 5

Sunrise, 4.49 a.m. Sunset, 9.19 p.m.

R.I.B.A., 9 Conduit Street, W.1. Tour to United States and Canada by the Cunard Liner "Samaria." Returning on July 25. Members wishing to take part in the trip should apply to H. T. Leese, 26-27 Cockspur Street, London, S.W.1.

WORTHING MUNICIPAL BATHS COMPETITION. Latest date for submission of designs.

SUNDAY, JULY 6

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Excursion to Romsey and the New Forest.

FRIDAY, JULY 11

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Annual River Trip. Visit to the West India Docks. The party will leave Westminster Pier at 2 p.m. Tickets 8s. 6d. (including tea). **2 p.m.**

SATURDAY, JULY 12

Sunrise, 4.56 a.m. Sunset, 9.14 p.m.

WEDNESDAY, JULY 16

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Annual Excursion to Denmark and Sweden, returning to London on July 29. Particulars of the tour, etc., are obtainable from F. R. Yerbury, the Secretary, Architectural Association.

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Liége. July 16–17.

FRIDAY, JULY 18

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Anvers. July 18–19.

SATURDAY, JULY 19

Sunrise, 5.4 a.m. Sunset, 9.8 p.m.

SATURDAY, JULY 26

Sunrise, 5.13 a.m. Sunset, 8.59 p.m.

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Visits to Leeds Castle, Chilham or Bodiam, etc., organized by the Canterbury and Tunbridge Wells Chapters. Particulars of the visits are obtainable from the Hon. Secretaries of the Chapters.

THURSDAY, JULY 31

LUTON TOWN HALL COMPETITION. Latest date for submission of designs.

DUDLEY SCHOOL COMPETITION. Latest date for submission of designs.

SOCIETIES AND INSTITUTIONS

R.I.B.A. PRIZES AND STUDENTSHIPS

The Council of the R.I.B.A. have decided that after January 31, 1931, in addition to the existing qualifications, competitors for the Tite Prize must at least be registered probationers, R.I.B.A., while competitors for the following prizes must at least be elected students, R.I.B.A. :

Soane Medallion.
Victory Scholarship.
Owen Jones Studentship.
Silver Medal for Essays.
Henry Saxon Snell Prize.
Alfred Bossom Travelling Studentship.
Grissell Prize.
Neale Bursary.
Hunt Bursary.
Godwin and Wimperis Bursary.

R.I.B.A. MAINTENANCE SCHOLARSHIP

The R.I.B.A. offer for award in July, 1930, one R.I.B.A. Maintenance Scholarship in Architecture, of a maximum value of £100 per annum, tenable from October, 1930.

The scholarship will be tenable in the first instance for one year and will be renewable for two further periods of one year each. It is intended to enable a student, who has not the necessary means, to attend an approved course at one of the schools of architecture recognized for exemption from the R.I.B.A. examinations. Students who are already taking such a course are also eligible to apply for a scholarship.

The value of the scholarship, up to the limit of £100, will depend upon the financial circumstances of the parents or guardians of the candidates. Further particulars may be obtained from the Secretary, Board of Architectural Education, R.I.B.A., 9 Conduit Street, London, W.1. The closing date for the receipt of applications, duly completed, is June 30, 1930.

LIVERPOOL ARCHITECTURAL SOCIETY

The H. W. Williams Scholarship for the promotion of architectural design in concrete, value £50, for one year, is open to all members of the Liverpool Architectural Society (and allied branches).

The scholarship for 1930 will be awarded for the best design submitted for the erection, in reinforced concrete, of a railway station in a new and fashionable seaside resort on the South-West Coast. The latest date for submission of designs is 5 p.m., July 31.

Further particulars are obtainable from Messrs. Hodgson, Morris & Co., chartered accountants, 41 North John Street, Liverpool.

TRADE NOTE

Messrs. Ruston and Hornsby, Ltd., of Lincoln, have received instructions from the Manchester Corporation to supply three of their six-cylinder vertical oil engines, each of 360 b.h.p., for generating electricity in connection with the waterworks undertaking on the Haweswater site. The engines work on the "Ruston" airless injection system, and they are of the totally enclosed forced lubrication type. The accompanying illustration shows an engine of the type selected by the Manchester Corporation installed in the power house of an industrial undertaking in the Eastern Counties. This is the seventeenth Ruston engine installed by the same firm, who have been users of Ruston airless injection engines for about thirteen years.

NEW INVENTIONS

The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.

LATEST PATENT APPLICATIONS

15438. Clough, H. Lighting sheeted buildings. May 20.
16077. Cowper, E. O. Building, etc., materials. May 24.
16008. Pierres, R. E. M. Constructional blocks, etc. May 24.
15642. Reimann, F. Building material. May 21.
15914. Robinson, A. P. Means for securing roof slates, etc. May 23.

SPECIFICATION PUBLISHED

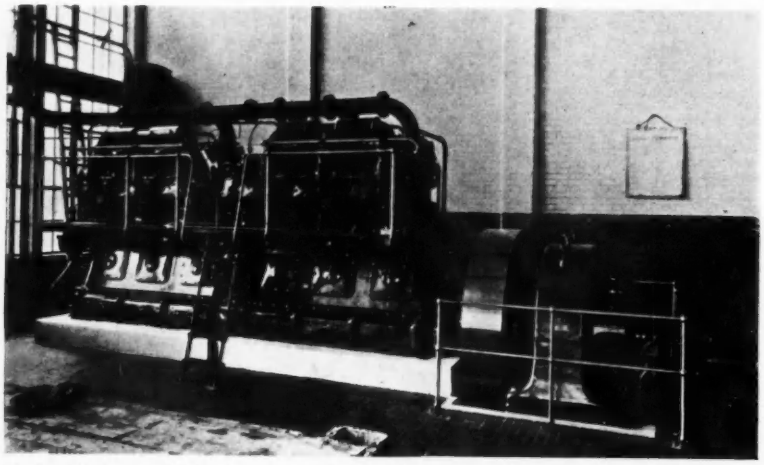
329291. Berry, A. F. Manufacture of blocks, bricks, slabs, and the like, suitable for use in the construction of roads, buildings, and other structures.

THE BUILDINGS ILLUSTRATED

Following are the names of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :

Church of Our Lady of Mercy and St. Thomas of Canterbury, Mount Road, Gorton, Manchester (pages 891-894). General contractors, Collins and Godfrey, who were also responsible for the reinforced concrete, plaster, joinery and church fittings. Sub-contractors : The Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt; Robinson and Kershaw, structural steel; Ames and Finnis, tiles; R. E. Pearse & Co., glass, glazing, casements and window furniture; Barrett and Wright, Ltd., central heating, boilers, electric wiring and electric heating; W. Bainbridge Reynolds, Ltd., electric light fixtures, door furniture and metalwork; J. Whitehead and Sons, Ltd., marble.

Capitol Cinema, Epsom (pages 895-896). General contractors, W. Creed & Co. Consulting structural engineer, S. W. Budd. Sub-contractors : Horseley Bridge and Engineering Co., steelwork; London Plenum Heating Co., heating and ventilation; Independent Sprinklers, Ltd., fire hydrants; Swanser and Son, Ltd., ornamental ironwork; Doodson and Bain, Ltd., steel casements; Wainwright and Waring, leaded glazing; A. Goslett & Co., sanitary goods; Thomas Cook & Co., mosaics; Decorative Tile Co., ceramic flooring and tiling; Permanite, Ltd., asphalt; F. De Jong & Co., Ltd., fibrous plaster and decorations; Hall and Dixon, Ltd., café and entrance hall decorations and furnishing, carpets, stage draperies, curtain control, counterweighting gear and stage lighting appliances; Pixton & Co., theatre seats; Locke and Soares, electrical installation; F. H. Pride & Co., electric fittings; Jackson Electric Stove Co., Ltd., electric kitchen equipment; Automaticket, Ltd., ticket machines; K.F.M. Engineering Co., Ltd., signs; Cement Marketing Co., cement; Frigidaire, Ltd., refrigerators and soda fountains; Walter Cassey, Ltd., locks and door fittings.



A six-cylinder vertical oil engine, similar in type to those to be supplied to the Manchester Corporation by Ruston and Hornsby, Ltd., for the Haweswater waterworks.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

Messrs. John Quality, Ltd., propose to erect shops at Clock House, East Street, BARKING.

The BARKING Education Committee has decided to proceed with the erection of a school at Eastbury, to extend the Gascoigne Street school, and provide temporary accommodation at Faircross school, at a total cost of £70,000.

Messrs. Marrable Bros. are to develop the Moddford Green estate, BARKINGSIDE.

Mr. Christian C. T. Doll has prepared plans for the erection of fifteen shops in Store Street, BLOOMSBURY.

The Commercial Ignition Co. is to extend its factory on the Great West Road, BRENTFORD.

Mr. Felix Goldsmith has prepared plans for the erection of a theatre on the site of the National Sporting Club in COVENT GARDEN.

Plans for the erection of over 100 houses on the Queen's Drive estate, EALING, have been prepared by Messrs. Douglas Smith and Barley.

Messrs. Rowley Bros. are to develop an estate at East Barnet Road, ENFIELD.

Mr. G. C. Swanson is to develop the Ardeen estate on the North Circular Road, FINCHLEY.

The FULHAM B.C. is to erect 375 flats and fourteen shops on the Swan brewery site, at a total cost of £275,000.

Messrs. E. Glenney and Son are to erect forty houses in Eton Avenue, ILFORD.

Messrs. C. J. Dawson, Son and Allardyce are to erect a Church Hall in Albert Street, ILFORD.

Mr. G. F. Siegarts is to erect thirty-four houses in Hine Gardens and Patrick Gardens, ILFORD.

The ILFORD Education Committee has obtained a site in Aldborough Street, for the erection of an elementary school.

The ILFORD Corporation has decided, before commencing the extensions to the maternity home, to communicate with the Ministry of Health, asking what additional grant would be likely to be made by the Ministry in the event of the Council proceeding with a scheme for the erection of a surgical block, part extension of the administrative block, and the provision of a new laundry, at a total estimated cost of £18,500.

The Brentford and Chiswick U.D.C. is to erect thirty-five houses on the ISLEWORTH site.

The L.C.C. has passed plans submitted by Mr. E. Bevington, on behalf of the Prudential Assurance Co., for the erection of buildings at Warwick Gardens, KENSINGTON.

Mr. G. T. Harman is to build fifty-eight houses in Bexhill Road and Salehurst Road, LEWISHAM.

The MARYLEBONE B.C. has passed plans submitted by Mr. Frederick J. Wills, F.R.I.B.A., for the new Cumberland Hotel, to be erected for Messrs. J. Lyons & Co., Ltd., in Oxford Street.

Mr. G. Val Meyer has prepared plans for the erection of a large block of shops and flats on the Aldford House site in PARK LANE.

The Middlesex Education Committee has obtained a site at Chase Side, SOUTHGATE, for the erection of an elementary school.

Mr. W. G. Shipwright is to erect a depot and works for Messrs. J. H. Sankey and Son, Ltd., in High Street, STRATFORD.

Mr. A. Jessop Hardwick has prepared plans for the erection of a church hall for St. Mary's Church, TWICKENHAM.

Messrs. Crewdson are to erect a nurses' home at Grove Hospital, TOOTING GROVE.

The WANDSWORTH B.C. is to construct a bridge over the River Wandle, at Springfield.

The new headquarters of the Royal Empire Society to be erected in Northumberland Avenue, WESTMINSTER, at a cost of £200,000, are to be commenced this year.

Mr. J. M. Wilson has been chosen as architect for the scheme for the erection of headquarters in WESTMINSTER for some twelve learned societies.

Mr. David W. Beck has prepared plans for the erection of houses on an estate at Dollis Hill, WILLESDEN, for Messrs. Lennox, Ltd.

SOUTHERN COUNTIES

The Oxford Education Committee is acquiring four acres of land as a site for the proposed new senior school at COWLEY.

Messrs. Rowsell and Ticehurst are to erect sixteen houses in Longland Road and Messrs. Scales and Baker, architects, are to erect ten houses in St. Anthony's Avenue, EASTBOURNE.

The West Sussex Education Committee is to erect an elementary school at HORSHAM, at a cost of £8,000.

Messrs. N. Moss and Son are to erect sixty-eight houses on the Rose Hill estate, OXFORD.

Mr. J. Rendle is to erect fourteen houses in Coleridge Street, PLYMOUTH.

The PLYMOUTH Corporation has acquired three acres of land at St. Budeaux, for a housing scheme.

The PLYMOUTH Corporation has passed plans, submitted by the Regent Cinema Syndicate, Ltd., for the erection of a cinema in Cambridge Road.

EASTERN COUNTIES

The COLCHESTER Corporation Housing Committee has received sanction to borrow £20,125, for the erection of fifty-five houses on the Ipswich-Harwich Road housing sites.

SOUTH-WESTERN COUNTIES

The CHELTENHAM Corporation has asked Mr. Malvern to prepare plans for the erection of houses in Folly Lane.

At a meeting of the CHELTENHAM Corporation, Mr. Rainger submitted a plan of the layout of additional roads on the St. Mark's Housing Estate. He was instructed to prepare plans for the erection of fifty-two houses thereon.

The LICHFIELD Corporation is to erect forty houses on the Council estate.

Mr. James A. Lawrence is preparing plans for the erection of a cinema at MINEHEAD, Somerset.

MIDLAND COUNTIES

The BIRMINGHAM Corporation is to widen the traffic junction at John Bright Street and Smallbrook Street, at a cost of £17,000.

The Sutton Trustees are to proceed with the erection of 112 houses on additional land recently acquired by them adjoining their existing site at Stoke Lodge, STOKE-ON-TRENT.

NORTHERN COUNTIES

The BIRKENHEAD Corporation is seeking sanction to borrow £7,863 for the erection of a further block of fifteen tenement dwellings, in the Abbey Street area.

The Board of Education has approved the final plans for the provision of a new public elementary R.C. school at Challis Street, BIRKENHEAD, to provide accommodation for 350 junior mixed and infant children.

The BOLTON Education Committee has forwarded the plans of the proposed Whitecroft Road elementary school, to the Board of Education for approval.

The Diocesan Board Church Extension Committee is to erect a church at Heights Lane, Heaton, BRADFORD.

The BRADFORD Education Committee has approved plans, submitted by the city architect, for the provision of new classrooms at the Thornbury School, and the general remodelling of the school, at a total estimated cost of £10,000.

The CARLISLE Education Committee has sanctioned an estimate of £27,666 for a new technical school, and £12,100 for a new art school.

The CARLISLE Education Committee has authorized the erection of the two new central schools at an estimated capital cost of £45,234, and has approved a new school in Upperby or Currock area, at a cost of £15,000. It is also to proceed with the erection of a new senior school in the Denton Holme area, at an estimated capital cost of £22,500, and to carry out adaptations at Brook Street at a cost of £7,000, and Robert Ferguson Street at a cost of £5,000.

The CHESTER Corporation is to erect another 200 houses on their own estate.

The Board of Education has approved plans of the Manchester Education Committee, for the erection of an elementary school at COLLYHURST, at a cost of £21,276.

The CREWE Education Committee is to erect an elementary school in Newgate Street, from the design of Mr. Leonard Reeves.

Mr. S. Main is to erect fifteen houses off Chorley Road, DOFFCOCKER, near Bolton.

Messrs. North and Andrew have prepared plans for the erection of 300 houses at HULL, for the Sutton Trustees.

The Board of Control has approved plans of the HULL Corporation of the proposed admission hospital at the mental institution.

The HULL Education Committee has decided to provide a school for 520 senior boys in Eastfield Road.

The HULL Corporation is to erect, by direct labour, twenty-eight tenements and four shops on the George Street improvement area, at a cost of £11,000.

The HULL Corporation is arranging with the L.N.E.R. for the provision of a 'bus station in connection with the scheme for the extension of the Paragon railway station.

The HULL Education Committee has submitted to the Board of Education revised plans for the erection of an elementary school for 1,320 pupils, at Westcott Street.

The LEEDS Corporation is to invite tenders for the erection of 146 houses and sixty cottage flats on the York and Selby Road estate. The city engineer has been asked to submit an estimate of the cost of carrying out the work.

The LEEDS Corporation has approved the layout plan in connection with the erection of further houses and flats on the remainder of the Middleton housing estate, and is to seek sanction to borrow £56,665 for the construction of streets and sewers in connection with the erection of the houses and flats.

Mr. Rupert Medcalfe has prepared plans for the erection of a hotel at Prescot Street, LIVERPOOL.

The OLDHAM Corporation has approved the estimate of £13,600 for the provision of administrative and staff blocks at the Strinesdale sanatorium.

The MANCHESTER Education Committee is to remodel the Birley Street school, at a cost of £19,000.

The MANCHESTER Education Committee has voted an estimate of £39,440, for the erection of a senior school at Gorton Mount.

The OLDHAM Corporation Buildings Committee has visited the Smethurst Street area, and instructions were given for a plan to be prepared, showing the layout of the cleared site with suggestions for the erection of tenement dwellings.

The SALFORD Education Committee is seeking sanction for a loan of £48,500 for the erection of a secondary school to accommodate 650 girls.

The SHEFFIELD Corporation has given instructions for the city architect's department to submit an estimate of the cost of erecting thirty houses at Ridgeway Road.

Mr. A. J. Belton is to erect sixteen houses in Dalmore Road, SHEFFIELD.

The SHEFFIELD Corporation has obtained sanction to borrow £83,480 for the erection of houses on the Shiregreen Estate.

A cinema is to be erected at SUNDERLAND, for Black's Northern Theatres.

The YORK Corporation has approved plans of the proposed new Roman Catholic elementary school to be erected in Fifth Avenue, Tang Hall, to accommodate 300 children.

The YORK Corporation proposes that certain sites on the Burton Stone Lane estate should be reserved for the erection thereon of flats or small-type houses, and has instructed the city engineer to negotiate for the purpose of land for housing purposes.

The Manchester Corporation is to erect a branch library at WILBRAHAM, at a cost of £17,000.

WALES

The Monmouthshire Education Committee is to erect a secondary school for girls at EBBW VALE.

Mr. C. F. Ward, borough architect, of NEWPORT, MON., is to erect a secondary school for 500 boys and 500 girls.

SCOTLAND

The GLASGOW District Board is to convert Caldwell House into a mental institution, at a cost of £25,000.

Messrs. W. and T. R. Milburn have prepared plans for the reconstruction of the Empire Music Hall, GLASGOW.

The Glasgow Education Committee is to erect a new school and janitor's house at Kelso Street and Dunwan Avenue, KNIGHTSWOOD.

The GLASGOW Corporation is to erect twenty-four tenement houses and four cottage houses in Dinart Street, RIDDRIE.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to April 30, 1930: 1919 Act, by local authorities, 25,129: 1919 Act, by public utility societies, 421; private subsidy schemes (1919 Additional Powers Act), 2,324; slum clearance schemes, 11,468; under construction, 2,198: 1923 Act, by local authorities, 4,030; 1923 Act, by private enterprise, 17,888; under construction, 1,456; 1923 Act, by public utility societies, 60; 1924 Act, by local authorities, 43,301; under construction, 5,553: 1924 Act, by private enterprise, 1,431; under construction, 1,513: 1924 Act, by public utility societies, 127; demonstration houses, 17; steel houses erected on behalf of Government by Scottish National Housing Company, 2,552. Total completed, 108,768; total under construction, 10,720: Total, 119,488.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	*1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	*1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	*1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	*1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	*1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	*1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	*1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour ;* NAVVY, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Broken brick or stone, 2 in., per yd.	0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

	£	s.	d.
Portland cement, per ton	2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day :

	£	s.	d.		£	s.	d.
Cart and horse	1	3	0	*Trailer*	0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.
RETURN, fill, and ram, ordinary earth, per yd. £0 1 6
SPREAD and level, including wheeling, per yd. 0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6
TRIMMING earth to slopes, per yd. sup. 0 0 6
HACKING up old grano. or similar paving, per yd. sup. 0 1 3
PLANKING to excavations, per ft. sup. 0 0 5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.
IF left in, add to above prices, per ft. cube 0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. . 0 2 1
DO. 6 in. thick, per yd. sup. . . 0 2 10
PUDDLING, per yd. cube 1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube 1 17 6
DO. 6-2-1, per yd. cube 1 12 6
DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.
LIAS-LIME CONCRETE, per yd. cube . £1 14 0
BREEZE CONCRETE, per yd. cube . 1 7 0
DO. in lintels, etc., per ft. cube . 0 1 6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube 0 3 9
FINE concrete benching to bottom of manholes, per ft. cube . . . 0 3 0
FINISHING surface of concrete spade face, per yd. sup. 0 0 9

DRAINER

LABOURER, 1s. 3½d. *per hour ;* TIMBERMAN, 1s. 5d. *per hour ;* BRICKLAYER, 1s. 8½d. *per hour ;* PLUMBER, 1s. 8½d. *per hour ;* WATCHMAN, 7s. 6d. *per shift.*

	£	s.	d.
Stoneware pipes, tested quality, 4 in., per ft.	0	0	10
DO. *6 in., per ft.*	0	1	3
DO. *9 in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. *6 in., per yd.*	0	8	0

Portland cement and sand, see "Excavator" above.

	£	s.	d.
Leadwool, per cwt.	2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. . . 0 4 3
DO. 6 in., per ft. 0 5 0
DO. 9 in., per ft. 0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft. 0 8 3
DO. 6 in., per ft. 0 10 3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
London stocks, per M.	4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0

Cement and sand, see "Excavator" above.

	£	s.	d.
Lime, grey stone, per ton	2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., Per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

	£	s.	d.
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra.	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour ;* DO. *fixer,* 1s. 9½d. *per hour ;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

	£	s.	d.
Portland Stone :			
Whitbed, per ft. cube	0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6

Cement and sand, see "Excavator," etc., above.

	£	s.	d.
HOISTING and setting stone, per ft. cube	0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

	£	s.	d.
SETTING 1 in. slate shelving in cement, per ft. sup.	0	0	6
RUBBED round nosing to do., per ft. lin.	0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	

SLATER AND TILER

SLATER 1s. 8½d. *per hour ;* TILER, 1s. 8½d. *per hour ;* SCAFFOLDER, 1s. 4½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200 :

	£	s.	d.
Portmadoc Ladies	14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

	£	s.	d.
Green Randoms, per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

	£	s.	d.
Clips, lead, per lb.	0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2

Cement and sand, see "Excavator," etc., above.

	£	s.	d.
Hand-made tiles, per M.	5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal :

	£	s.	d.
Ladies, per square	4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0

WESTMORLAND, in diminishing courses, per square 6 5 0
CORNISH DO., per square 6 3 0
Add, if vertical, per square approx. 0 13 0
Add, if with copper nails, per square approx. 0 2 6
Double course at eaves, per ft. approx. 0 1 0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 0
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

	£	s.	d.
Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18s. 0d. per square.

	£	s.	d.
FIXING lead soakers, per dozen	0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square . .	0	10	0
LABOUR only in laying slates, but including nails, per square . .	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour ;* JOINER, 1s. 8½d. *per hour ;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds) :

	£	s.	d.
7 × 3, per std.	22	0	0
11 × 4, per std.	30	0	0

Memel or Equal. Slightly less than foregoing.

	£	s.	d.
Flooring, P.E., 1 in., per sq.	1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube . . 0 4 6
DO. framed in floors, roofs, etc., per ft. cube 0 4 6
DO. framed in trusses, etc., including ironwork, per ft. cube . . 0 8 6
PITCH PINE, add 33⅓ per cent.
FIXING only boarding in floors, roofs, etc., per sq. 0 13 6
SARKING FELT laid, 1-ply, per yd. . 0 1 6
DO., 3-ply, per yd. 0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq. . 2 0 0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run . 0 0 4½
DO. 9 in. wide and over per ft. sup. . 0 1 2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.		2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1½ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0		6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up £0 3 0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£3	0	3
Linseed oil, raw, per gall.	0	4	6
DO., *boiled, per gall.*	0	4	9
Turpentine, per gall.	0	4	7
Patent driers, per cwt.	1	10	6
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	2	2	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	6
DO., *flat, per gall.*	0	15	6
DO., *paper, per gall.*	1	2	6
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . from	0	2	3
Asbestos sheeting, $\frac{5}{32}$ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, $\frac{5}{32}$ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	$\frac{3}{16}$ in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	3	5	4	3	7½	6	4½	5½	7	6
Alder	3½	3	3	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak												
1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak												
1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

THE PUBLISHER'S PAGE

MUCH attention is bound to be focussed on St. Paul's Cathedral during the next few weeks in view of its official reopening on June 25, after seventeen years of restoration work. The progress of this restoration work gave Mr. R. Brook-Greaves an unique opportunity thoroughly to survey and measure the entire building in a way which would not otherwise have been possible, and the results of this research have been incorporated by him in his famous Isometric Drawing. Below is a reproduction of this drawing in miniature ($\frac{1}{300}$ of its original size). Reproductions in collotype to a size of 51 ins. by 37 ins. have been made by the Architectural Press, and published at 30s. each, either mounted on cloth or in four sections unmounted.

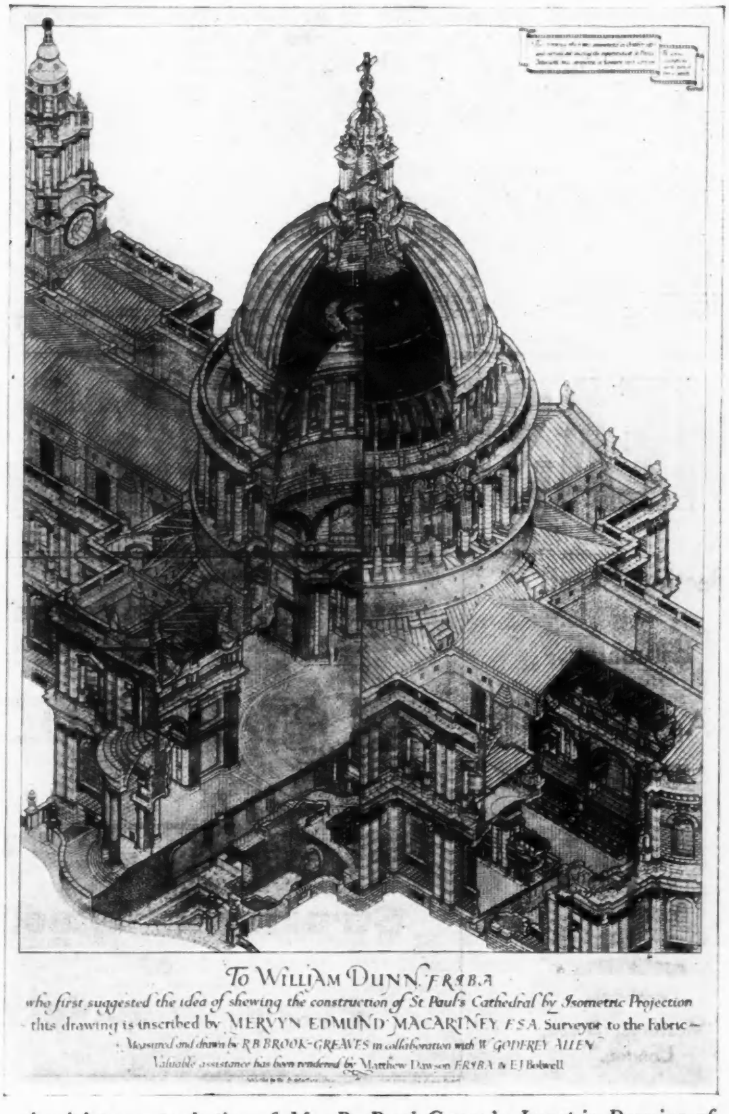
Mr. Walter Tapper, writing of the drawing, says: "It is the result of years of labour spent in investigating the exact methods of constructing the building, and in demonstrating these in a manner that the architect and layman can appreciate, although only experts can realize the patience and perseverance that such a work has involved. The drawing is a novel way of placing before the modern student the scientific methods which Wren employed to carry his dome by means of masonry on to the eight great piers . . . an unique drawing which should last for all time, both as a study in the construction of a great design, and as an example of masterly architectural draughtsmanship for students to follow. It may be confidently assumed that copies of this drawing will be found in every architectural school and technical library in the world, and in the possession of everyone interested in constructive architecture and fine draughtsmanship."

It may be of interest to readers to note that the Council of the R.I.B.A. has arranged to celebrate the re-opening by a special general meeting on Monday, June 23, at which a lecture dealing with the Restoration of the Cathedral will be delivered by Captain C. Stanley Peach and Mr. W. G. Allen. The lecture will be illustrated by slides and by an exhibition of models, masonry specimens, drawings and photographs, which will remain open till June 28.

AFTER seeing the first instalment of the new Specification Writer department in THE ARCHITECTS' JOURNAL for May 28, it is interesting to turn to the *Journal of the Architectural Association* containing the report of Dr. Stradling's paper on the Building Research Station. At the end of the lecture, Mr. Hope Bagenal, moving a vote of thanks, said: "By every post we architects receive messages of glad tidings of the solutions of all our problems. Many of these messages are so repulsive in their lettering and make-up that they go straight into the waste-paper basket; they tend to eliminate themselves, but how are we to know which are good and which are bad?"

That is, indeed, the question. We have, as Mr. Bagenal said, of necessity to proceed by experiment. The store of organized knowledge on the subject of new materials and new processes is lamentably small. "If we take the question of books, for instance," said Mr. Bagenal, "have we got plenty of textbooks covering the enormous range that we have to cover? The answer is, No; our textbooks are very few and, with a few exceptions, poor. I am afraid we must admit that knowledge for its own sake is not our strong point as a profession." To supply the knowledge to which Mr. Bagenal refers is precisely the purpose of this new department inaugurated in THE ARCHITECTS' JOURNAL. Together with the section entitled "Questions that Arise," by the end of the year it should already constitute a body of information the like of which is not obtainable elsewhere today.

Inadequate as they are, our textbooks today were built up in just such a manner. Builders and architects throughout the country went forward step by step trying new ways and new materials, and as each innovation was tested and found to be reasonable and secure, it passed into tradition which is our common possession today.



A miniature reproduction of Mr. R. Brook-Greaves's Isometric Drawing of St. Paul's Cathedral, recently published by the Architectural Press.

BUILDING CONTRACTS OPEN

Unless the contrary is expressly stated, all deposits required for bills of quantities, etc., are returned on receipt of bona-fide tenders. The words "Fair Wages Clause" inserted in certain paragraphs signify that persons tendering must conform to a fair wages clause in the contract, which requires them to pay the rates of wages current in the district. Application for plans and particulars should be made to the address given at the end of each entry.

LUDLOW : HOUSES

June 12.—For the erection of twenty-two non-parlour-type houses, for the T.C. W. G. Lane, Borough Surveyor, Guildhall, Ludlow. Deposit £1 1s.

HEYWOOD : HOUSES

June 14.—For the erection of sixty houses in six blocks, in Peel Lane, Heywood, for the Corporation. J. B. Nuttall, Borough Surveyor, Municipal Buildings, Heywood.

ARMAGH : SCHOOL

June 14.—For the rebuilding of Temple public elementary school (near Keady), for the County of Armagh E.C. G. H. Mills, Architect, The Mall, Armagh, or from the Education Office, Armagh. Deposit £2 2s.

CROYDON : HOUSES

June 16.—For the erection of fifty-two houses at Mitcham Road estate, for the T.C. The Borough Engineer, Town Hall, Croydon. Deposit £3 3s.

WREXHAM : HOUSES

June 16.—For erection of 118 dwelling-houses on the Holt Road estate, for the T.C. J. England, Borough Engineer, Wrexham. The houses will be tendered for in five groups varying from twenty-five to twenty-eight in each group.

FELTHAM : HOUSES

June 16.—For completion of forty houses and maintenance items on 164 houses on the Poors' Land housing scheme, Burns Avenue, Feltham, for the U.D.C. The work consists principally of joinery fixings and decoration. J. P. Blake, Architect, Bank House, High Street, Hounslow. Deposit £2 2s.

LEEDS : EXTENSION

June 16.—For the extension of the Colony for Mental Defectives at Meanwood Park, Leeds, to comprise the erection of adult blocks, children's blocks, lowest grade blocks, school, entrance lodge, etc., for the Mental Health Services Committee. The Executive Officer, Mental Health Services Committee, 38 Park Square, Leeds. Deposit £3 3s.

WHITEFIELD, LANCS : HOUSES

June 16.—The Whitefield U.D.C. invite alternative tenders (all trades) for the erection and completion of (1) 108 houses and (2) 220 houses on the Victoria estate, Whitefield; also drains, paths and fences, road and sewer works in connection therewith. C. F. Porter, Clerk, Whitefield. Deposit £2 2s.

PATELEY BRIDGE : HOUSES

June 17.—For the building and completion of twenty-eight scullery-type houses, for the R.D.C., viz. : (1) ten houses at Clint Road, Birstwith; (2) ten houses at Harrogate Road, Hartwith; and (3) eight houses at Greenwood Avenue, Pateley Bridge. Contractors may tender for (1), (2) or (3), or the whole. E. Moorhouse, Clerk, the Council Offices, Pateley.

TORQUAY : HOUSES

June 18.—For the erection of seventy-six blocks of houses in pairs and nine blocks of houses in fours on the Barton housing site. The Borough Engineer's Office, Town Hall, Torquay. Deposit £2 2s.

SCUNTHORPE : BATHS

June 18.—For (1) erection and completion of public baths on Doncaster Road, Scunthorpe; (2) supply and erection in connection with the baths of (a) heating and ventilating apparatus and hot and cold water installation; (b) continuous filtration, etc., plant; (c) laundry plant; (d) wiring for electric lighting and power, for the Scunthorpe and Frodingham U.D.C. W. Farrar, Engineer and Surveyor, Council Offices, Scunthorpe. Deposit, £2 2s.

LONDON (ST. PANCRAS) : GARAGE BUILDING

June 19.—For erection of garage building (with about 5,000 square feet floor space) in borough of St. Pancras, for the Trustees of the Eleanor Palmers' Charity. Salter, Rex and Co., Architects, 311 Kentish Town Road, N.W.5. Deposit £1 1s.

DONEGAL : CHURCH

June 20.—For erection of new memorial church of the Four Masters in the town of Donegal. A. E. Smith, Quantity Surveyor, 16 Upper Merrion Street, Dublin. Deposit £3 3s.

SWINDON : HOUSES

June 21.—For erection of eighty-four houses and six houses with shops on their Hurst housing estate, for the Corporation. J. B. L. Thompson, Borough Surveyor, 34 Regent Circus, Swindon.

BINGHAM : HOUSES

June 21.—For the erection of houses in the following parishes, for the Bingham R.D.C.: Aslockton, four; Cropwell Bishop, eight; Plumtree, four. C. W. Kendrick, Housing Surveyor, Council Offices, Bingham. Deposit £3.

BOLTON : MARKETS BUILDINGS

June 23.—For erection and completion of new markets buildings, consisting of fruit and vegetable market, fish market and other erections, proposed to be built on land abutting upon the southerly side of Ashburner Street, Bolton, for the T.C. The Borough Engineer and Surveyor, Town Hall, Bolton. Deposit £5.

BOLTON : BUILDING

June 23.—For erection and completion of weight and measures office, public weights office, caretaker's house, restaurant and public conveniences, proposed to be erected on land abutting upon the northerly side of Ashburner Street, Bolton, for the T.C. The Borough Engineer and Surveyor, Town Hall, Bolton. Deposit £5.

LONDON (LEYTON) : EXTENSION

June 23.—For erection of a public washhouse as an extension to the public baths, Cathall Road, Leytonstone, E.11, for the T.C. The building includes reinforced concrete work, drainage, minor alterations to the existing public baths and contingent works. The cubic contents of the new building are approximately 118,000 cubic feet. A. P. Howell, Borough Engineer, Town Hall, Leyton, E.10. Deposit £10.

LONDON (KINGSBURY) : HOUSES

June 24.—For construction of the following, for the U.D.C. : (a) Thirty-four houses on the Church Lane housing site and (b) new concrete road (about 300 yards lineal) and soil and surface water sewers. R. C. N. Newport, Surveyor, Council Offices, Kingsbury, N.W.9. Deposit £2 2s.

CRUMLIN : SCHOOL

June 28.—For erection of a Council school for juniors and infants at Sofrydd, Crumlin, for the Abertillery Education Committee. Rees Rees, Acting Secretary, Queen Street, Abertillery. Deposit £5.

MEASURES BROS. 1911 LTD.

Section Sheets and Estimates on Application.



Telegrams : "Measures, Boroh, London."

STEEL JOISTS

Structural Steelwork — OF — Every Description.

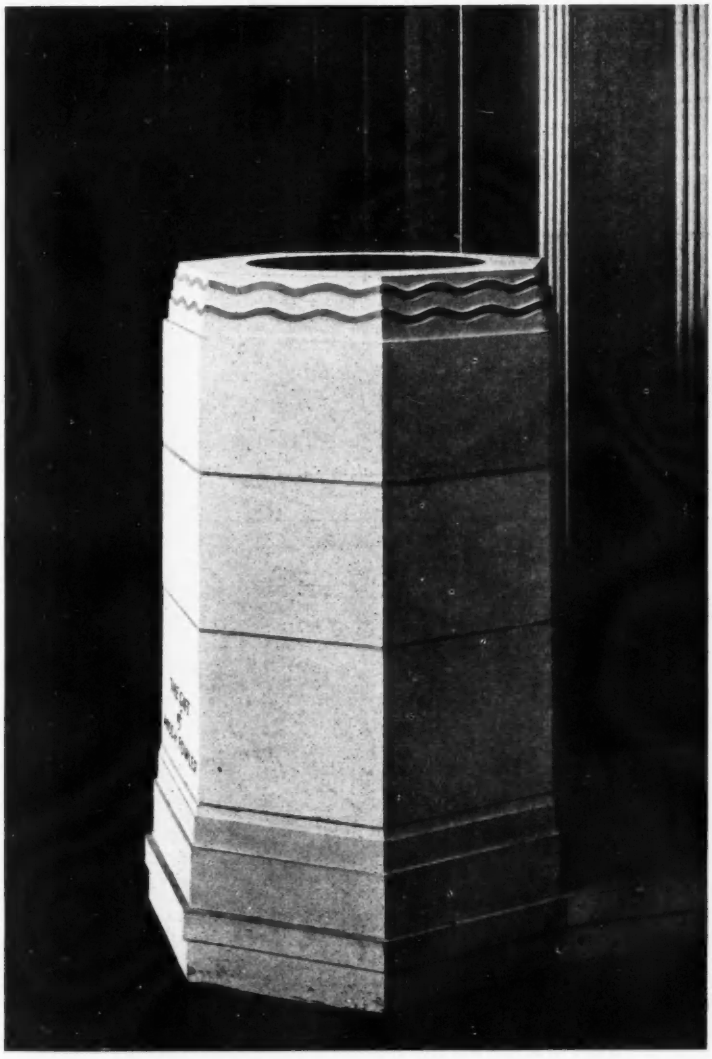
Prompt Delivery from Stock at Lowest Market Prices.



Telephone No. : Hop 3985 (4 lines).

SOUTHWARK STREET, LONDON, S.E.

SCALE DETAILS:
A WEEKLY SERIES



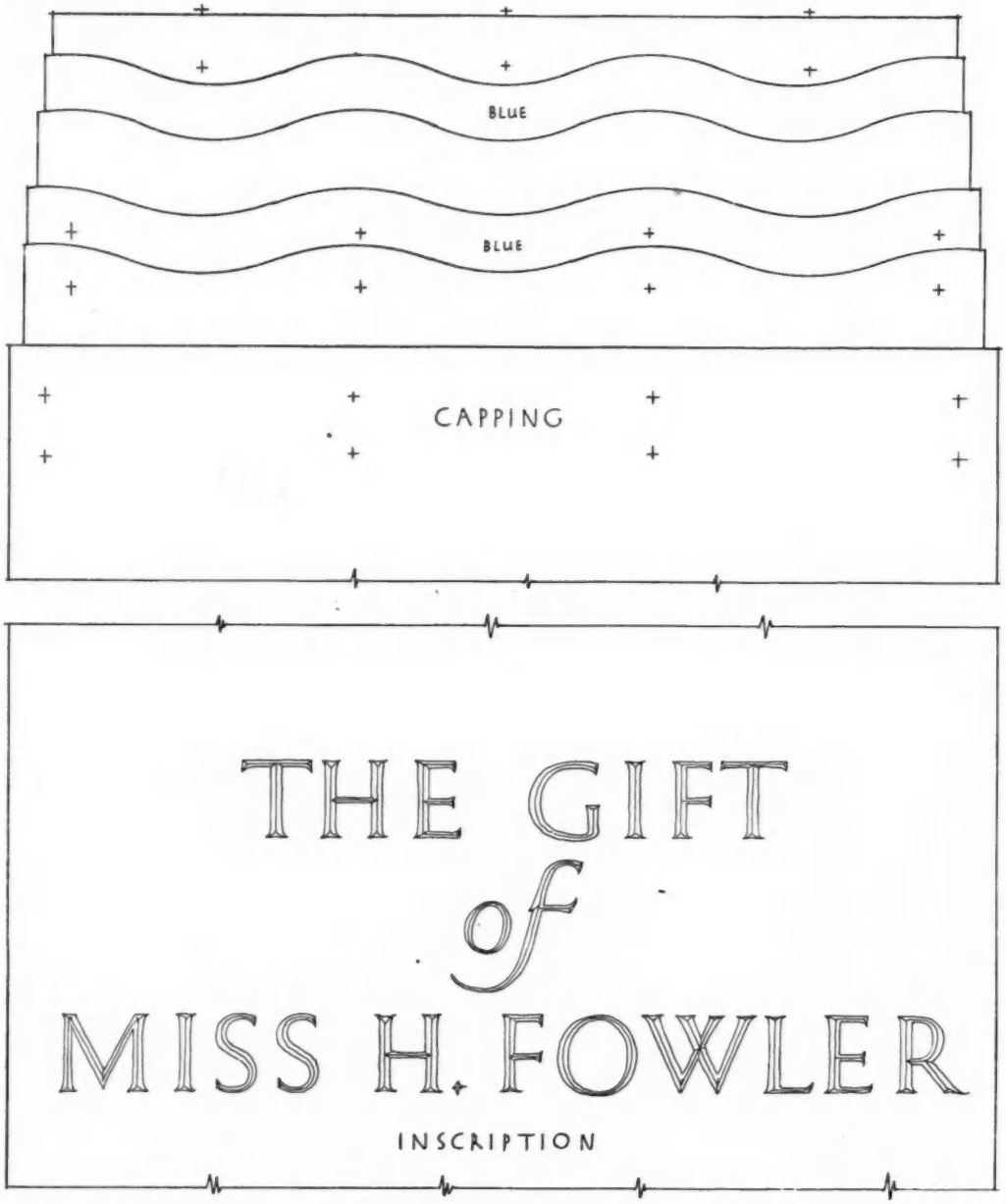
FONT IN THE FIRST CLUBLAND CHURCH, WALWORTH, S.E.
DESIGNED BY EDWARD MAUFE

THIS seven-sided font by Edward Maufe for the First Clubland Church (of the Wesleyan denomination) is of almost extreme severity, and is built of four pieces of Portland stone, the topmost carrying a band of wave offsets, two of them coloured a clean chalk blue, and the whole standing on a raised stone daïs, projecting some 2 ft. from the silver-panelled wall of the church. It is a gift to the church, and this fact is proclaimed by means of a short inscription carved on the lowest stone, in the manner known as Roman, most excellently by Mr. Eric Munday, in refreshing contrast to the usual travesty of Gothic black-letter that is so difficult to decipher.

There is no provision for drainage, as it is customary with this sect to bring the bowl of water used for the ceremonial to the font and remove it afterwards.

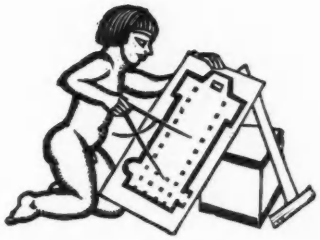
NOTE: The drawing reproduced overleaf may be read with architect's scales (1" and 6"=1 foot).

FIRST CLUBLAND CHURCH · FONT · INCH SCALE & HALF FULL SIZE



EP 3

THE ARCHITECTS' JOURNAL



WEDNESDAY, JUNE 18, 1930

MANUFACTURERS and ARCHITECTS

"When I want aught I do ask; and, where asking faileth, I do most usually take."

—R. L. STEVENSON: *The Black Arrow*

THERE is evidence that a situation is coming into existence between architects and the manufacturers of building materials that, as it extends, threatens to present a truly remarkable aspect, one that might well have been the invention of W. S. Gilbert's fertile brain. For we have certain manufacturers, on the one hand, wailing that they can find no market for their goods; while, on the other, certain architects are crying out that they cannot get the materials they want without going abroad for them. This is notably the case with such things as decorative metalwork, light fittings, furniture, glass, textiles, etc. Recent letters published in this JOURNAL go to show that architects are quite prepared to use standard articles, but insist (so far as possible) that these shall be designed to fall into place with modern taste and surroundings.

Many manufacturers, on their part, confess to finding increasing difficulty in selling their goods in this country, and, in addition, to a tendency for their foreign trade to disappear. Those countries to which formerly there was a big export trade are now manufacturing the same articles for themselves; and because they are untrammelled by evil traditions and obsolete plant, their results are often better. This in itself has a further repercussion against the British manufacturer, because the erstwhile importer of British goods is now tending to export to Great Britain. In most cases the actual quality of the goods (from a manufacturing point of view) is not of such a high standard as that of the British article; but where the design is very much better, the architect may feel justified in sacrificing a little hypothetical quality to the ultimate appearance and æsthetic soundness of his work.

As this process develops in all parts of the world, the British manufacturer must ultimately rely purely and simply on such home sales as he can salve from the acute foreign competition. The manufacturers affected cannot, surely, fail to see this ultimate conclusion of the process; and so it is the more remarkable that they do not do more to recapture the home market which is their last resort.

The first thing for a manufacturer who finds himself in such case to understand is that the architect does not buy foreign goods only because they are cheaper. He buys them chiefly because they are better designed from every point of view. The foreign manufacturer is ten years ahead of his time; the British is, alas! often ten years behind.

It may be difficult for manufacturers to foresee the nature of impending demands; we even admit that this is so. On the other hand, there are very many people who can foretell it fairly accurately for them. We hear from time to time from members of the profession that they are clamouring for such and such a type of design, in such and such a material, and we cannot suppose that these comments are denied to the manufacturer and are reserved solely for our editorial ears.

Moreover, manufacturers do have ample opportunity for finding out what architectural thought is demanding. Every year hundreds of designs, and suggestions for designs, are submitted by architects for tender. Some of these are carried out in this country; others are executed abroad on the score of cost. But the British manufacturer has seen them; he should be able to analyse them and discover the fundamental ideas which underlie them; and, if he cannot do this himself, let him call in one of the many specialists who can do it for him. And then, above all, let him take the specialist's advice.

Manufacturers are not asked to take architects' own individual designs and standardize them (though there is much to be said for this also). All that architects have a right to expect is that the spirit and underlying thought of their designs should be catered for—as it is being catered for abroad. But this they do expect.

We know of one or two firms which have employed experts to find out for them what architects really want; the experts have duly reported—and have been ignored. This type of British manufacturer would seem to have arrived at that point at which he has neither the initiative nor the courage to *create* a demand, a particular in which he once led the world.



A TUDOR SCHOOL IN BRICK AND STONE

On Saturday last the Rt. Hon. Viscount Hailsham formally opened the Arnold, the north and final, wing of the Eastbourne College War Memorial Buildings. The entire scheme has taken about seven years to complete. The war memorial was unveiled and dedicated by Lieut.-General Sir Charles H. Harington, on June 28, 1925, on completion of the central tower and the south wing. Messrs. Tatchell and Wilson, the architects, have designed the new buildings in a free Tudor manner, in brick and stone with a tile roof, due regard being given to tradition and the scale of the existing school. Further illustrations and a description of the buildings appear on pages 929–932.

NEWS & TOPICS



William Graham Holford, a native of South Africa, and this year's winner of the Rome Scholarship in Architecture, is one of the Liverpool School students. He already has many successes to his credit, including the Travelling Scholarship to America, in virtue of which he recently spent six months in the United States.

LIVERPOOL WINS THE ROME SCHOLARSHIP

THE Rome Scholarship in Architecture has gone once again to the Liverpool School. William Graham Holford, the winner, is one of the school's most brilliant students, and a man of parts besides. He won last year the £300 Travelling Scholarship given to the Liverpool School by the Society of Arts and Sciences of America, and with it paid a six months' visit to that country, travelling and working in various offices. As a member of the University he has edited the undergraduate magazine, *The Sphinx*, and taken a leading part in the dramatic society, as actor, producer, scenic artist and even author, while his water-colour work, sent back to South Africa, has brought him in a more than negligible income. He will be the fifth Liverpool man to win the Rome out of the thirteen times it has been awarded, and with his American experience behind him he should be able to make a more profitable use of the opportunity for study than any before him. I trust he may.

RAGNAR ÖSTBERG : HONORARY FOREIGN ROYAL ACADEMICIAN

Last Tuesday the secretary of the Royal Academy announced that, at a general assembly of Academicians and Associates, Professor Ragnar Östberg was elected an Honorary Foreign Royal Academician. This is the second British honour that has been conferred on this famous Swedish architect. It will be recalled that he was awarded the Royal Gold Medal in 1926. Östberg is one of the outstanding exponents of the Renaissance in Sweden, and it is largely due to his Stadhuset at Stockholm that Swedish architecture is today so well known throughout the world. Of important buildings, I think the Ostermalms Public Secondary School and the Patent Office are, after the town hall, his greatest achievements.

MODERN BUILDING PRACTICE

It is good news that the National Physical Laboratory and the Building Research Station may shortly embark upon an investigation of existing building regulations with a view to bringing them into accord with the best modern practice. So many new materials and new methods of construction are now coming into use that it is difficult for local authorities to be fully acquainted with these and keep their building bylaws up to date unless they receive expert advice. The need for caution is so great that local authorities are apt to be far too conservative, and consequently a little "difficult" when an architect or engineer confronts them with plans showing constructional innovations. Even the Ministry of Health, which has a number of well-qualified technical advisers, has occasionally offended in the matter. Architects have reason to look forward to excellent results if the Building Research Station can be induced periodically to make authoritative pronouncements upon modern methods of building practice.

THE FLOOD WALLS OF THAMES

As a result of the disastrous Thames floods of 1928 it has been decided to raise all river frontages within the control of the Port of London by at least a foot. The estimated cost of doing this is £10,000,000, and the task of deciding who is to find the money has by no means been settled, although the obvious proximity of riverside householders puts them at the end of the pew, as it were. Doubtless they will be called upon for some contribution, though I cannot see how any part of the cost of a work which is necessitated by drainage, water supply, and by heavy dredging below the Pool at London Bridge can possibly be wrung from a poor artist on a Hammersmith Mall just because he happens to live there. I feel like asking whether Lord Melchett has done anything towards paying for Lambeth Bridge and its raised embankment. It is a question quite pertinent to ask.

THE BRITISH–FRENCH WEEK AT BRISTOL

The exhibition at Bristol of French modern art, recently held in connection with a local entente, was so well conceived and completed that I wish it could be moved, like a travelling circus, to enlighten and inspire other provincial cities. Paintings, engravings, tapestry, metal-work, medals, ceramics, glassware and sculpture were shown, including works by Bonnard, Cézanne, Degas, Segonzac, Gauguin, Matisse, Monet, Utrillo, Rodin, Bourdelle, Maillol and Lalique, yet the total number of exhibits was only 274, mainly small items. The selection was made from Paris by French connoisseurs to give a synoptic glimpse of modern French art, and that was



Maurice Utrillo's "Church of St. Denis de la Chapelle," recently on view at the Royal West of England Academy, Bristol.

exactly its achievement. It not only set a high standard, but gave a lesson in self-absorption in the subject. Each thing was designed to be true to itself, and the extraneous banished like the devil. The working of the same principle can be seen in modern French architecture, but I do not think the results are yet comparable. The Sketch Club members of THE ARCHITECTS' JOURNAL should be interested in the drawing (reproduced) by Utrillo.

PLUMB WISDOM !

Many readers of the JOURNAL have welcomed with delight the announcement in the leading article of last week and in the published statement from the L.C.C., in which a charter of freedom was granted to architects desiring to place lavatories and closets away from the outside walls. But I have also heard doubts expressed as to whether the concession will really be operative, save in exceptional cases, and some of my friends were not at all convinced that they would henceforth be allowed to place *the pipes* inside the walls. After all, from the architectural point of view this is the most important consideration. For the occasions when it seems especially necessary to bury w.c.s in the middle of a building and ventilate them artificially are comparatively rare, except in congested sites, but the disarray of sanitary pipes is almost universal.

★

In order to set at rest the fears of my friends who are so intent to design façades without these disfigurements, I approached an official of the L.C.C. He was in a position to inform me that the new regulations were genuinely intended to afford relief to the architect, and there need be no apprehension that they will be interpreted in a cavilling spirit. Every consideration will, in fact, be given to plans showing arrangements of the kind, for which good cause can be adduced. I gather, however, that the provision of properly constructed ducts to convey the piping will be regarded as of the first importance. It only remains now for local authorities throughout the country to follow the enlightened lead of the L.C.C.

" BADGER'S GREEN "

As it is all too seldom that architecture finds its way on to the stage, I naturally rushed to see Mr. R. C. Sherriff's new play, " Badger's Green," at the Prince of Wales Theatre, London. The mood is indeed changed from that of " Journey's End," for we have here a first rate comedy of village life, in which an elderly doctor, a major and a retired stockbroker who " run " the little community of Badger's Green, learn to their horror that a syndicate has been formed with the object of erecting hundreds of bungalows, a cinema, a dance hall, steam sanitary laundry and Japanese tea-gardens in the vicinity of their own homes.

★

In the midst of an exceedingly acrimonious meeting of the entertainment committee of the cricket club, news of the intended vandalism falls like a bolt from the blue upon the doctor and the major, who immediately decide to stand shoulder to shoulder in face of the common enemy. The Director of the Syndicate, however, proves altogether too clever for them, and finds it is only necessary to ask the major to organize the sports and the doctor to advise as to the right location of a hospital in order to win over these worthies to an enthusiastic support of the scheme. In justice to the Director of the Syndicate, however, it must be admitted that he also introduced a very intelligent plea for co-operation between the estate developers such as himself and the old residents of the villages, who understand and revere the spirit of the locality. Unfortunately, the crux of the matter, namely, the *design* of the dwellings, does not enter into the discussion. The play, however, had the great merit of good humour, and should certainly stimulate interest in the bungalow question.



The cartoon that won the competition for the window in Liverpool Cathedral Lady Chapel.

THE CALTON JAIL CONTROVERSY

At the Annual Convention of the Incorporation of Architects of Scotland, the meeting unanimously passed a resolution strongly urging the Government to see that a public competition should be held to procure a design for the proposed buildings to be erected on the site of the Calton Jail. It will be remembered that the Royal Fine Arts Commissioners for Scotland heavily criticized the drawings and model submitted to them by the Office of Works, and that as a result these were withdrawn while a decision was being arrived at. The strong likelihood of a public competition was hinted at at the time, though no further disclosures have been made public. It is well, therefore, that public expression of opinion should seek to precipitate action in the right direction.

WHITEFRIARS GLASS : 1680–1930

I spent an interesting hour in the stained-glass studios at 100 Wigmore Street, where Messrs. James Powell (the Whitefriars Glassworks) are celebrating by an exhibition their 250th anniversary. To them architects are particularly invited, to foster co-operation between architect and glassmaker. Here are drawings by D. G. Rossetti, Sir E. Burne-Jones and Sir Edward Poynter, besides the coloured cartoon of St. Margaret which won the Liverpool Cathedral Lady Chapel competition. Among several pieces of work for erection in modern American churches, the largest is one of seventeen clerestory windows for St. Thomas's Church, New York—where the strong light necessitates the use of very deep shadows and exceptionally strong colour. In contrast to this window, for Messrs. Goodhue Associates, is a coloured drawing for a window in an English church by Sir Giles Scott. Here the colours are pale in tone and the shadowed effects lightly touched. In addition, various effects for wall treatment in *opus sestile* and mosaic are to be seen, and some striking examples of glass enamel work, with its effective semi-metallic brilliance. Cases of domestic glass, from the seventeenth century onwards, include a set designed by Sir Thomas Jackson after spending hours in the glass-house watching the men at work.

ASTRAGAL



THE CITY OF NORWICH

Its Churches and Antiquities

By G. A. STEPHEN (City Librarian)

UNTIL little more than a century ago Norwich was still a walled city, and many traces remain of the sturdy flint walls and towers erected in the thirteenth century as a means of defence. The walls encircled the city on all except the east side, where the river provided excellent natural protection.

Within the city an almost bewildering choice of ancient and interesting buildings confronts the visitor. Pride of place must be given to the Cathedral and the Castle, the priceless heritage left by the Normans. The cathedral, built of Caen stone, with flint rubble for the core of the walls and large piers, was founded by Bishop Herbert de Losinga in 1096, and by the date of his death in 1119 the east end of the cathedral as far as the site of the present organ had been erected. The work was continued by his successors, additions being made even so late as the fifteenth century. The graceful spire, 315 feet high, was erected in the late fifteenth century. The glorious cloisters, 176 feet square, took nearly 150 years to complete, and show examples of both Decorated and Perpendicular styles. Within the cathedral the most notable features include the fine nave with fourteen bays, imposing in its length (250 feet); the beautiful vaulting of the roof, with its rich collection of sculptured bosses; and the remarkable Reliquary Bridge which spans the Ambulatory.

Norwich Castle stands on a high mound, and its square Norman keep is a landmark for miles around the city. It was built in the twelfth century, and throughout the feudal period was the scene of constant siege and strife. After the building of the city walls the castle lost its military importance, and was used as the county jail until 1884, and in 1894 it was opened as a city museum. The valuable contents include one of the finest collections of raptorial birds in existence, a splendid collection of pictures by members of the Norwich School of Painting and by modern local artists, and an attractive series of rooms illustrating the story of Norwich through the ages.

Many times has Norwich been called the "City of Churches," some thirty of her ancient parish churches providing

a wealth of interesting features. They nearly all date from the fifteenth or early sixteenth centuries, and are mostly of flint, in the Perpendicular style. It is believed that there is Saxon work in the churches of St. John Timber-hill, St. Julian, and St. Mary Coslany, and there is Norman work in St. Etheldreda, St. Benedict, St. Paul, and St. Michael-at-Thorn. Special mention must be made of the church of St. Peter Mancroft, one of the finest parish churches in the country. Standing in the heart of the city, it is cruciform in shape, with nave, aisles, chancel, transept chapels, and a magnificent panelled tower with a fine peal of bells. St. Michael's Church, Coslany, should not be missed, for its flint work is exquisite, and it has a most beautiful doorway.

Unique among Nonconformist places of worship is the Old Meeting House, a dignified brick chapel, erected in 1693, and one of the earliest surviving specimens of Free Church architecture. Within a stone's-throw is the Octagon Chapel, a fine brick building of the Georgian period, with an elegant and striking interior, designed on an eight-sided plan by a local architect, Thomas Ivory.

The fifteenth-century Guildhall is one of the most interesting municipal buildings of England, and one of the best examples of those flint-faced buildings for which the city is especially notable. The Council Chamber still retains the form upon which it was designed in Tudor times; it has panelling of linen pattern round the walls, and in the panels are the arms of several of the city companies. Above are portraits of mayors and sheriffs. The stained-glass windows contain some of the original glass. The civic plate and regalia—one of the richest collections in the country—includes a rock crystal mace, which is said to be the most beautiful of its kind in Europe, and the magnificent Reade Salt (1568).

St. Andrew's Hall (where the R.I.B.A. banquet will be held), and Blackfriars' Hall, both now used as civic halls, together form one of the best examples still remaining of friar architecture in this country. Originally, the two buildings formed the Church of the Dominican Friars, St. Andrew's Hall being the nave and Blackfriars' Hall the choir. The interior of St. Andrew's Hall shows some fine Perpendicular work, with an excellent five-light window at the west end. The adjoining Blackfriars' Hall has a timbered roof, and is well lighted on each side by five Perpendicular windows, with a seven-light window at the east end, with beautiful Decorated tracery.

Of the many old-time mansions of merchant princes and other eminent citizens, the city retains some interesting examples. Strangers' Hall, a beautiful specimen of a merchant's house of the late medieval period, was converted into a Folk Museum, illustrating English domestic life through the ages, by the late Mr. L. G. Bolingbroke, who presented it with its contents to the city in 1921. It contains an exceptionally fine banqueting hall, with oriel windows, open kingpost roof, carved oak panelled screen, and minstrels' gallery.

The Sketch Club, this week, is devoted to Norfolk subjects (pages 948-9).

Full particulars of the Holiday Sketches Competition are given on advertisement page No. viii.

Visitors to the Conference will be interested to know that a special display of architectural books has been arranged by Messrs. Goose and Son, Ltd., of 2 Haymarket, Norwich.

Another building converted to museum purposes is the old City Bridewell, a flint-faced building, parts of which were built prior to 1403, when William Appleyard, the first mayor of Norwich, occupied a house on the site. From 1584 to 1828 the building was used as a Bridewell, or house of correction for vagrants. It was restored in 1923 by Mr. H. N. Holmes, a former lord mayor of the city, and was presented by him to the city to be used as a museum of local industries.

Yet another historic mansion preserved for the city in recent years is Suckling House, so called from the family into whose hands it passed in the sixteenth century. It was built in the first half of the fourteenth century, and retains the original tie-beam and trussed kingpost. Later, the great hall was altered and additions were made to the house. The house was restored by the Misses Colman, and presented by them to the city in 1923, together with the adjoining Stuart Hall, as a memorial to their sister, Laura Elizabeth Stuart.

On the northern outskirts of the city is the Lazar House, a Norman building contemporary with the cathedral. Traces of the original workmanship remain, including a fine doorway on the west side. The building is now used as a branch public library.

Other examples of notable residences are the Music House in King Street, originally erected before the reign of King John, and reconstructed at the end of the fifteenth century; the Dolphin Inn (Heigham Street), built in 1587, which was the residence of Joseph Hall, Bishop of Norwich, 1641-1656; and the house (on Tombland) of Augustine Steward, a wealthy merchant and mayor of the city, who built it about 1530.

Apart from individual buildings, there is much in Norwich to attract the eye of the discerning beholder. The city abounds in picturesque courts and alleys, and some fine doorways and gateways. Amid a welter of modern buildings there is almost always some relic of a bygone age—perhaps it is a row of gabled houses, or maybe an old-fashioned inn. There is something typical of the city in the fact that visitors coming to it in the luxurious motor-coaches, which are modernity's last word in travelling, may quite probably find themselves landed at a quaint old thatched inn which has a history going back to the fifteenth century.

Of all her ancient streets, none has achieved more fame than Elm Hill, a quiet byway in the heart of the city, where the wanderer may drop back immediately into the very atmosphere of medieval England. In this old cobbled street may be found the gabled houses which for centuries have been the residences of noted citizens, and in particular the Strangers' Club, Pettus House, and the Briton's Arms, that picturesque old inn with its thatched roof and mullioned windows, its oldest portions dating back to the time of Edward III.

The Conference Tours

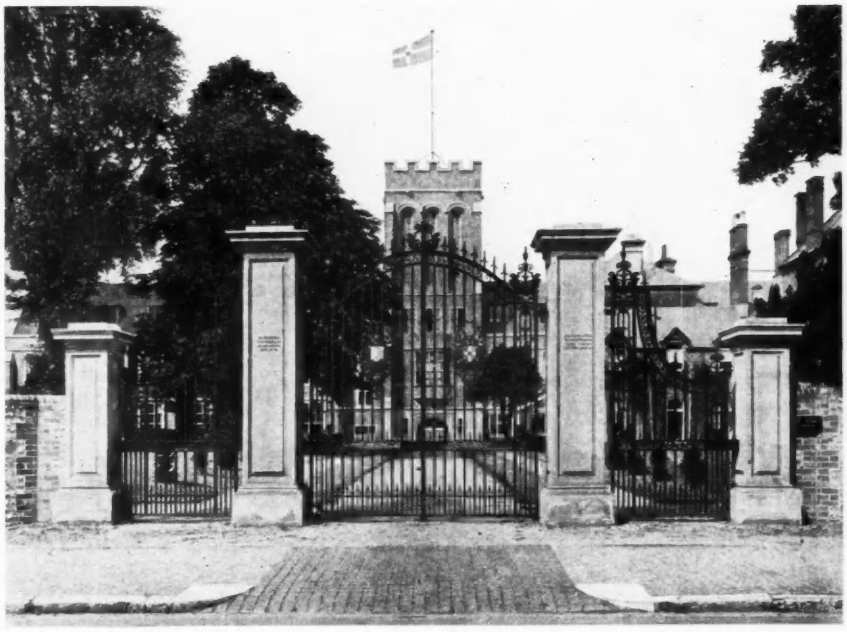
The headquarters of the conference are at the Stuart Hall, Norwich.

The programme of visits is as follows :

Thursday, June 19.—2.30 p.m. : Alternative visits : (*a*) Elm Hill, Grammar School Chapel, the Deanery, the Cathedral ; (*b*) Strangers' Hall, the Guildhall, St. Peter Mancroft, Bridewell (outside), St. Peter Hungate, Princes Street; (*c*) St. George's Colegate Church, Octagon Chapel, Old Meeting House, St. Helen's, Bishop Bridge; (*d*) Market Place, St. Peter Mancroft, Bethel Street, Lady Lane, High School, St. Stephens, Surrey Street, All Saints Green, Cattle Market; (*e*) St. John Maddermarket Church, St. Gregory's Church, St. Laurence Church, Strangers' Hall, Bridewell, Princes Street.

Friday, June 20.—Alternative whole-day tours. Halts will be made at places as follows : (1) Cawston Church, Salle Church; Aylsham [lunch]; Blickling Hall [tea]; (2) Melton Constable Hall, Binham Priory, Blakeney Church, Blakeney [lunch]; Cley Church, Salthouse, Letheringsett [tea]; (3) tour of the Norfolk Broads by motor-launch. The party will be taken to Wroxham and brought back from Barton by motor-coach. There will be a special regatta on Wroxham Road and visits to Ranworth and Ludham Churches, Horning [lunch], How Hill [tea]; (4) East Barsham Hall, Raynham Hall, Castle Acre Priory [lunch], Swaffham [tea]. Inclusive cost of visit, 12s.

Saturday, June 21.—Informal visits : 9.15 a.m. to 1 p.m. : (*a*) Great Yarmouth (motor-coach tour), 5s.; (*b*) Wymondham and Hingham (motor-coach tour), 3s. 6d.; (*c*) Norwich Cathedral.



The entrance gates to the new school buildings have been erected as a memorial to H. R. Thomson, who was headmaster of Eastbourne College from 1900 to 1905.

WAR MEMORIAL BUILDINGS AT EASTBOURNE COLLEGE

DESIGNED BY TATCHELL AND WILSON

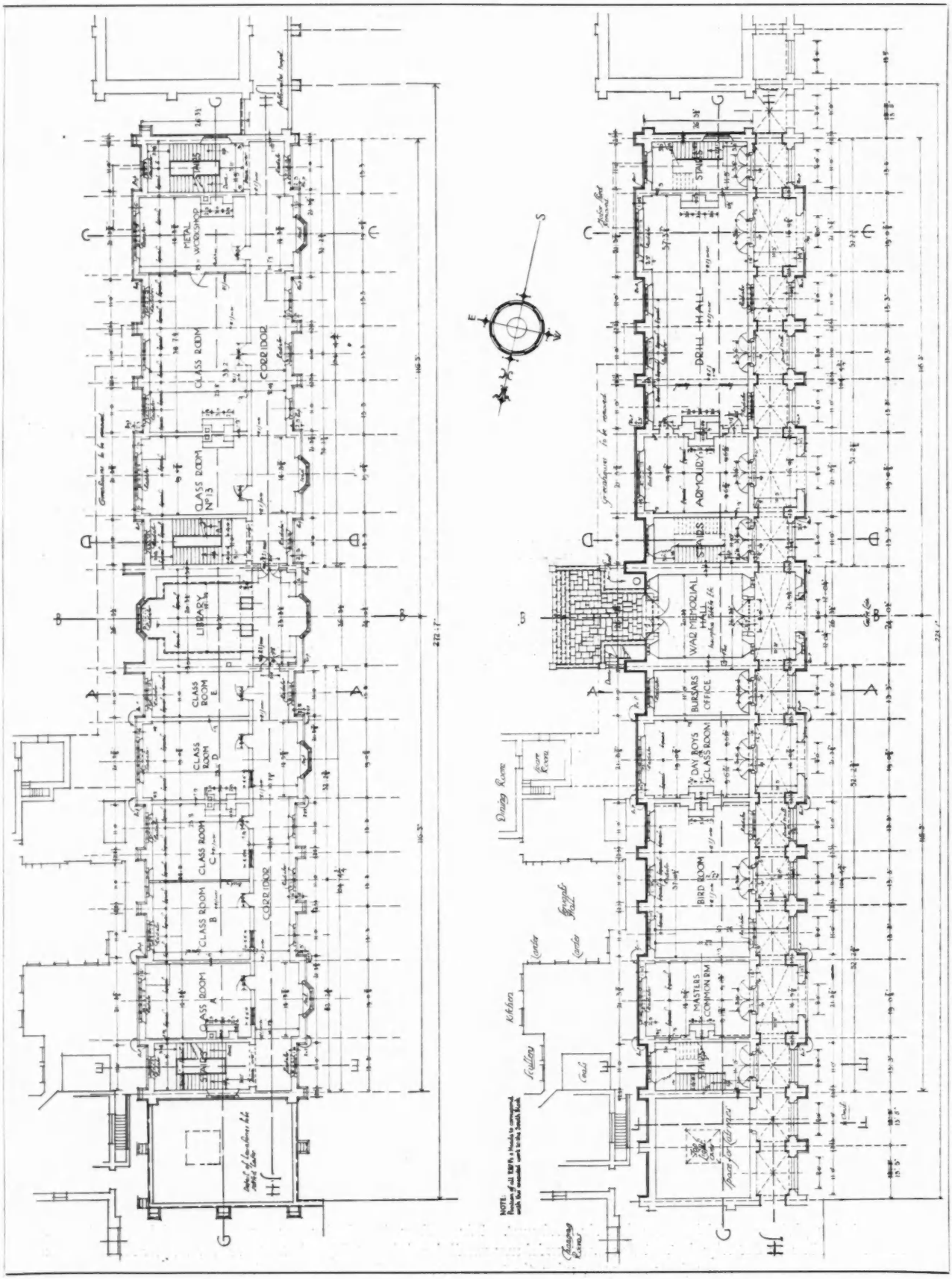
THE Eastbourne College War Memorial Buildings were commenced on July 4, 1923. When the tower and south wing were completed, the unveiling and dedication of the war memorial was performed by Lieut.-General Sir Charles H. Harington, on June 28, 1925. Mr. E. C. Arnold was then headmaster.

It was not until February 28, 1929, that a contract was entered into for the erection of the remainder of the buildings, of which the north wing was formally opened by the Rt. Hon. Viscount Hailsham on Saturday last, June 14. This wing is named the "Arnold" wing as a fitting tribute to Mr. E. C. Arnold's services to Eastbourne College, both as an assistant master and headmaster from 1899 to 1929. It is to his foresight, enthusiasm and generosity that the existence of these buildings is primarily due.

The scheme, from first to last, has taken about seven years to carry out. It is therefore permissible to state briefly the problem with which the school was



A general view of the memorial buildings from the north-west. The north or Arnold wing was formally opened by the Rt. Hon. Viscount Hailsham on Saturday last. The war memorial was unveiled and dedicated by Lieut.-General Sir Charles H. Harington on June 28, 1925, when the tower and south wing were completed.


DRILL HALL
WAR MEMORIAL HALL
ARMOURY
STORES
BURSARS OFFICE
DAY BOYS CLASS ROOM
BIRD ROOM
MASTERS COMMON RM
CLASS ROOM A
CLASS ROOM B
CLASS ROOM C
CLASS ROOM D
CLASS ROOM E
CLASS ROOM No 13
LIBRARY
CORRIDOR
METAL
WOODWORK
STAIRS
Kitchen
Pantry
Dining Room
Carpenters Room
Boiler House
Caretaker
Lavatories
Entrance Porch
N
S
E

Ground- and first-floor plans. The north wing is named the Arnold wing as a tribute to E. C. Arnold, assistant master and headmaster of Eastbourne College from 1899 to 1929. It was primarily through his foresight, enthusiasm and generosity that the buildings came into existence. The north wing contains a room to house Mr. Arnold's magnificent bird collection.





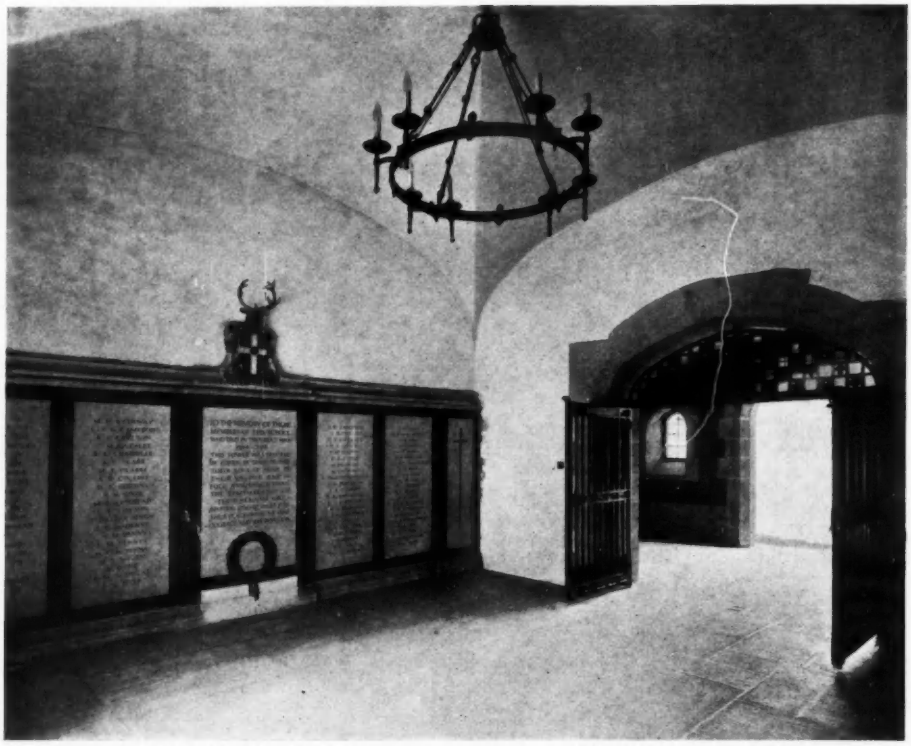
Eastbourne College War Memorial Buildings.] *[By Tatchell and Wilson.*

The tower, looking from the west ; and the entrance to the war memorial hall from the east forecourt. On the walls of the memorial hall, which is situated on the ground floor beneath the tower, are panels inscribed with the names of the fallen (see page 932). On the upper floors of the tower are the Cavendish and Dennys libraries, four music-rooms and a classroom.

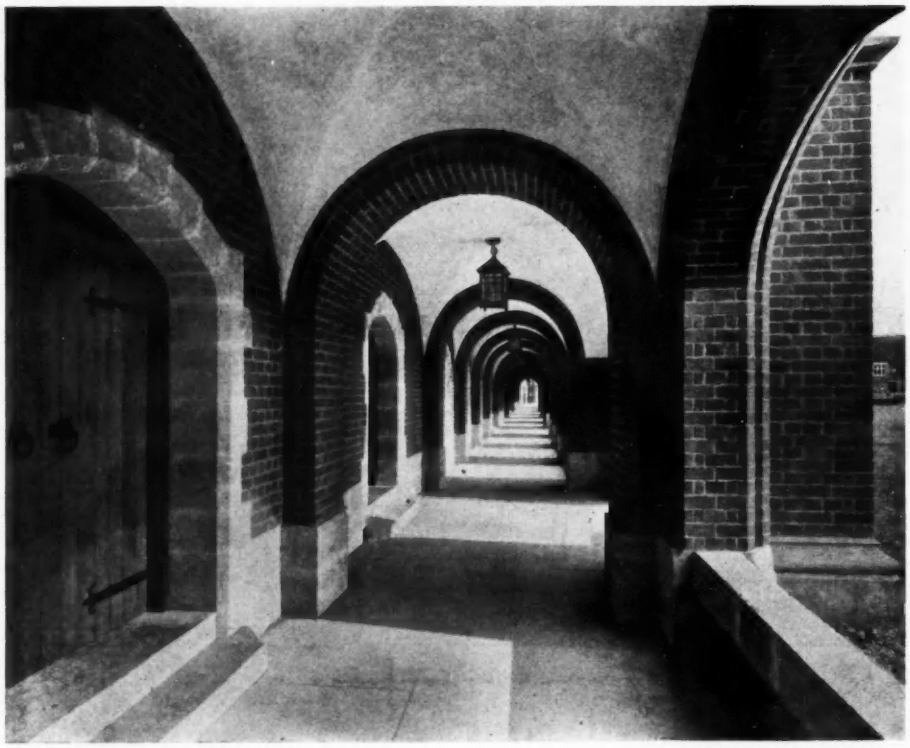
confronted, namely, to erect a worthy war memorial which would at the same time form part of a larger scheme for providing further accommodation for the school; and to design this in such a way that sections could be carried out from time to time as funds permitted, without detriment to the design as a whole when completed.

Largely on Mr. Arnold's initiative, instructions were given to the architects at the end of 1921 to prepare plans for the whole scheme, and building commenced with the tower in 1923. The tower forms the central feature of the new additions, comprising also the north and south wings, one on either side. Eventually these additions can be linked up with the big school by an extension of the cloisters which run along the whole of the buildings on the west side.

The central tower, by reason of its height and size, which will always focus attention, has been designed as the war memorial proper, and made the chief external architectural feature of the school buildings. It contains on the ground floor the war memorial hall, on the walls of which are inscribed the names of the fallen, and dedicatory inscriptions; and on the upper floors the senior and junior libraries, known as the Cavendish and the Dennys respectively, four music-rooms and a classroom.



The war memorial hall. On the left walls are seen some of the dedicatory inscriptions and name tablets; and on the right the wrought-iron folding gates leading to the cloisters, illustrated below.



Eastbourne War Memorial Buildings. [*By Tatchell and Wilson.*

The cloisters run along the whole of the west side and provide the only means of access to the new school accommodation. Eventually they will be extended to link up the new work with the big school.

The remainder of the buildings have been carried out in sections as the money has been available. The erection of the south or Devonshire wing followed closely on the completion of the tower, and was carried out in two sections. It contains the armoury and drill hall, five classrooms and a workshop about 60 ft. in length.

The "Arnold" wing completes the whole scheme. It contains a bird room to house the magnificent bird collection which Mr. Arnold leaves behind to the school as another memorial to his tireless activity and to his ability as a naturalist of at least national reputation. Six carved stone panels on the east elevation bear testimony

to this fact, and embody with other motifs Mr. Arnold's arms and crest.

The remainder of the ground floor comprises the masters' common room, headmaster's and bursar's offices. On the upper floors are five large and two small classrooms and a drawing school of the same dimensions as the workshop in the corresponding south wing.

The elevations are simple, and are balanced with the tower as a central feature. Tradition and the scale of the buildings already existing have been studied, and a free Tudor inspiration in brick and stone with a tile roof has been adopted.

The work has been designed by Messrs. Tatchell and Wilson, FF.R.I.B.A., Mr. Wilson being himself an Old Eastbournian. It is fitting that the work, from first to last inspired by Mr. Arnold, should be completed as a memorial to him, when the Chairman of the Council (Major-General Sir Arnold Sillem), the Headmaster (Mr. G. V. Carey), and the Bursar (Major S. H. Foot) are all Old Eastbournians.

HEADINGTON SCHOOL FOR GIRLS, NEAR OXFORD

DESIGNED BY GILBERT T. GARDNER

THIS school has been erected on the high ground at Headington, about two-and-a-half miles east of the centre of the city of Oxford. building is situated in beautiful grounds, about twenty-five acres in extent, surrounded by a fine belt of trees.

The facework generally is of multi-coloured bricks, and the whole of the dressings are in reconstructed Clipsham stone. The roofs are tiled with hand-made sand-faced tiles of varying deep shades of red and purple.

The floors of the classrooms are of Oregon pine blocks, those of the corridors and cloakrooms of composition, and of the library and other principal rooms of polished oak blocks.

The assembly hall, centrally located, and extending through two floors, is about 72 feet by 47 feet in area, in addition to the stage. The floor is of polished oak boards, and the walls are panelled in oak to a height of eight feet; the ceiling is enriched with fibrous plaster ribs.

The stage is arranged for school plays, and has a proscenium opening, about 25 feet by 18 feet, surrounded with a bold fibrous plaster moulding. Over the centre of the stage is a shield, the counterpart of that over the main entrance, bearing the school motto (" Fight the Good Fight of Faith ") in Greek characters.

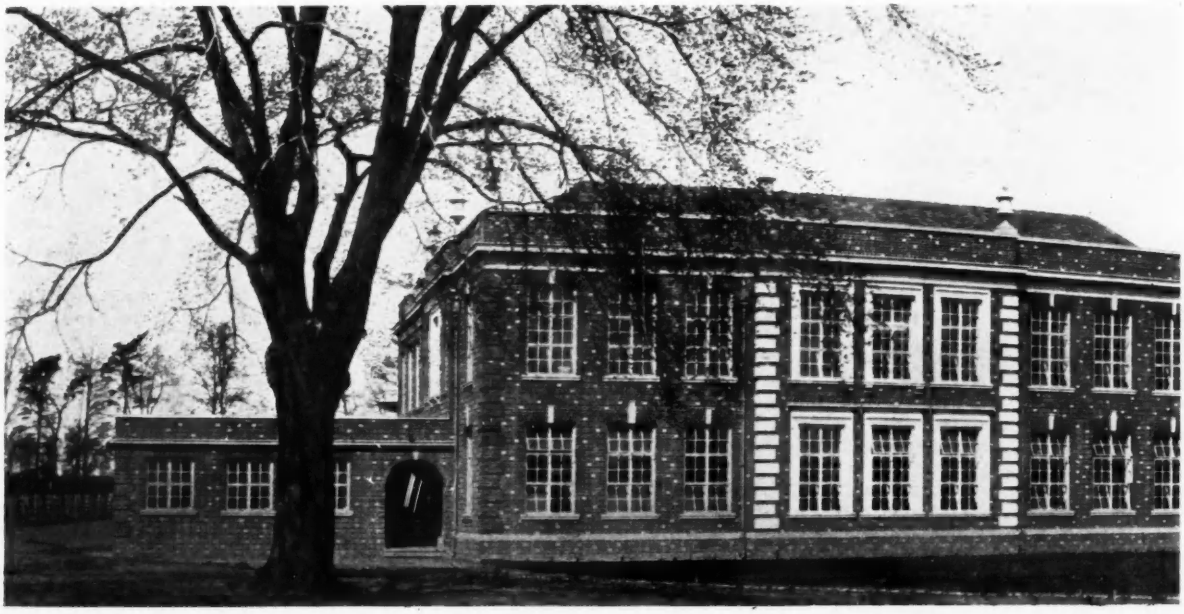
The furnishing of the library, in Austrian oak, has been provided by the efforts of present and past staff and pupils of the school. The heating is by low-pressure hot water, from oil-fired boilers. All the classroom windows are glazed with sun-ray glass.



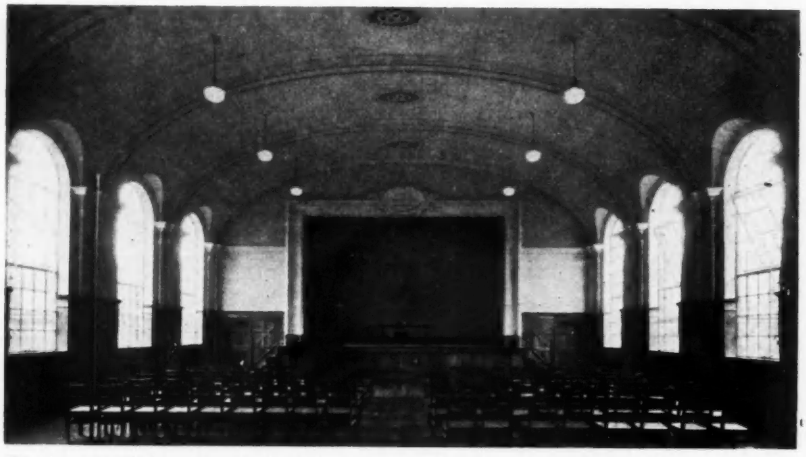
The main entrance leads, through a vestibule, to the entrance hall, and thence direct to the assembly hall. The materials are multicoloured bricks and sand-faced roof tiles. The dressings are of reconstructed Clipsham stone, and the shield bears the device, " Fight the Good Fight of Faith." The bay window above the porch lights the library.

The foundation stone was laid by the Rt. Rev. the Lord Bishop of Ripon, one of the founders, on June 21, 1929, and the completed building will be formally opened by Princess Mary, Countess of Harewood, exactly a year later, i.e. on Saturday next, the 21st inst.

Accommodation is provided for two hundred and fifty to three hundred girls, of whom about one hundred will be day boarders and the remainder resident boarders. For these, detached boarding houses are provided within a short distance of the school itself. The



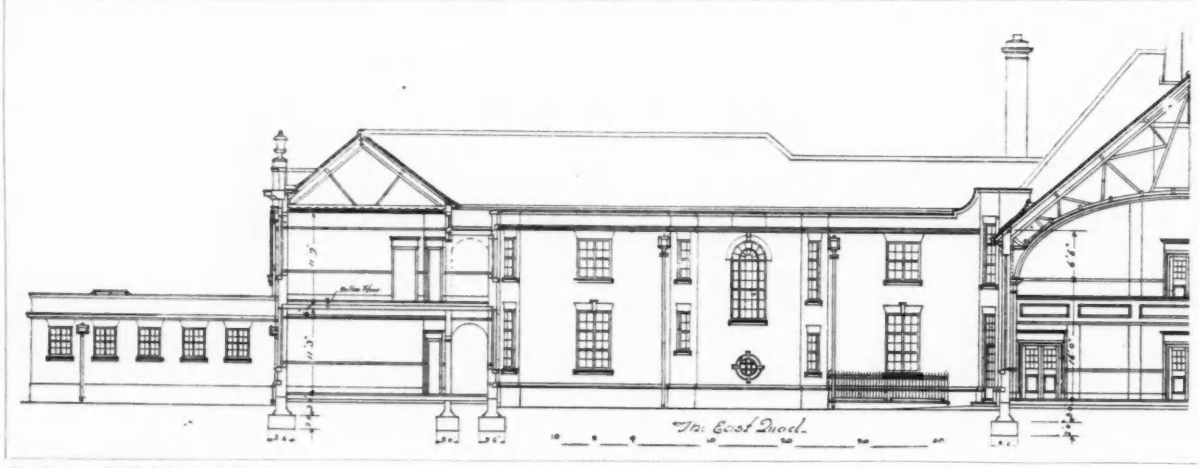
The above photograph gives a general view of the main front from a southerly viewpoint; the architect's elevational and sectional drawing, reproduced across the foot of this double-page opening, gives an indication of the design of those portions of the other side of the building which overlook two quadrangles, separated by the assembly hall. The E-shaped



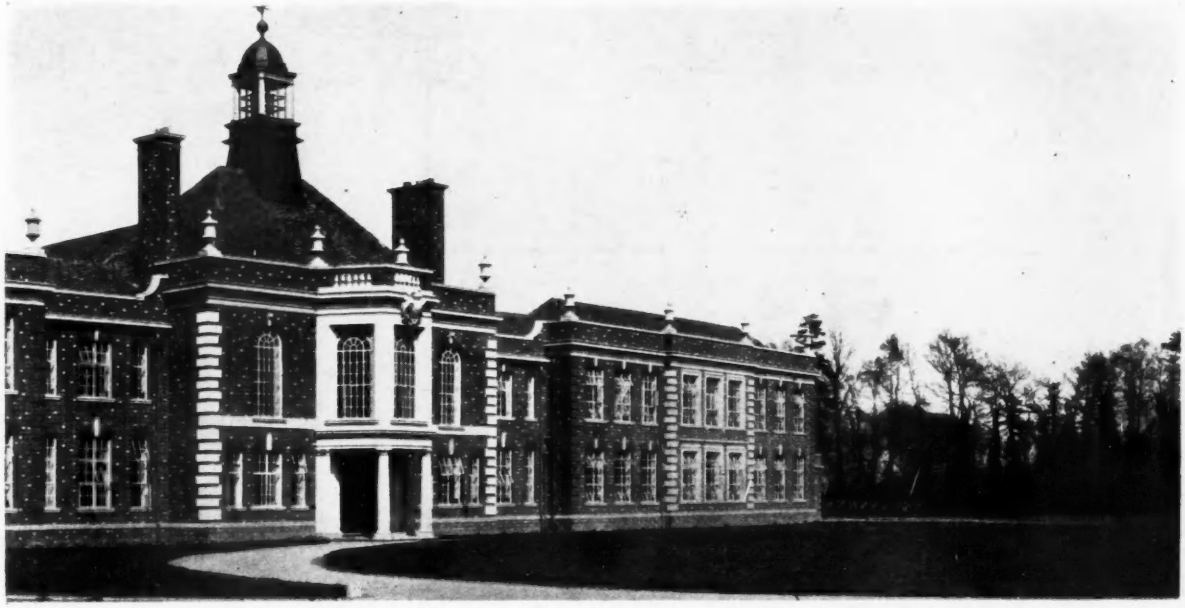
The interior of the assembly hall, looking towards the stage; the windows overlook the quadrangles on either side. The hall extends through the upper floor of the school.



The west cloister, looking from the north corridor towards the gymnasium.



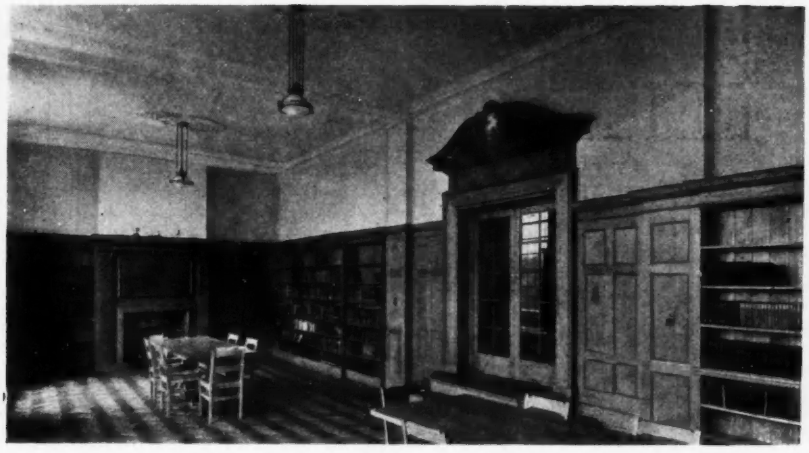
Headington Girls' School, Oxford.]



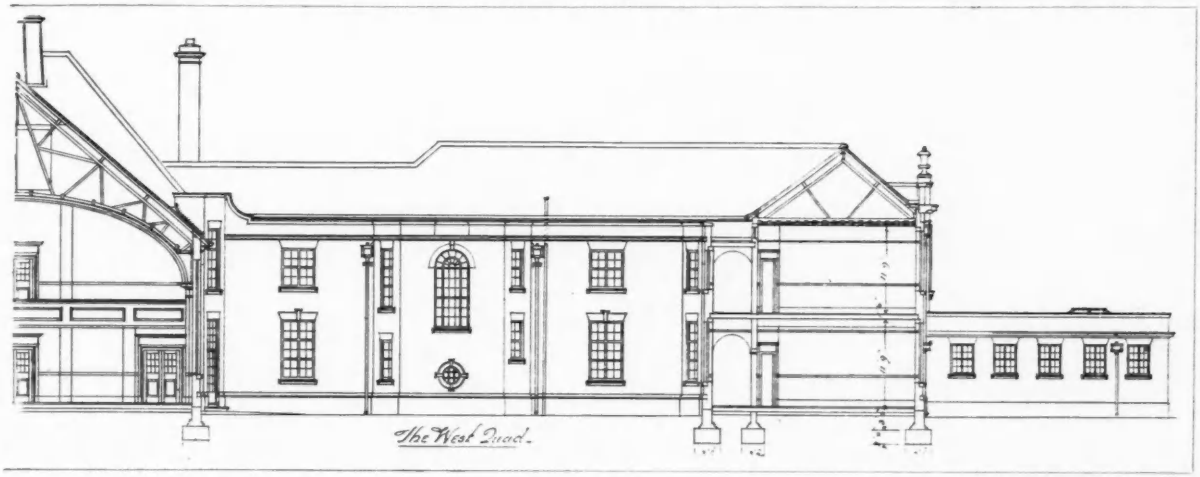
arrangement is clearly shown on the plan of the ground floor illustrated on page 936. The ranges of rooms on both floors in either wing are classrooms, stairs being arranged in the two projecting bays facing the quadrangles on the north-westerly side; lavatory accommodation is isolated in two one-story blocks at either extreme end of the building.



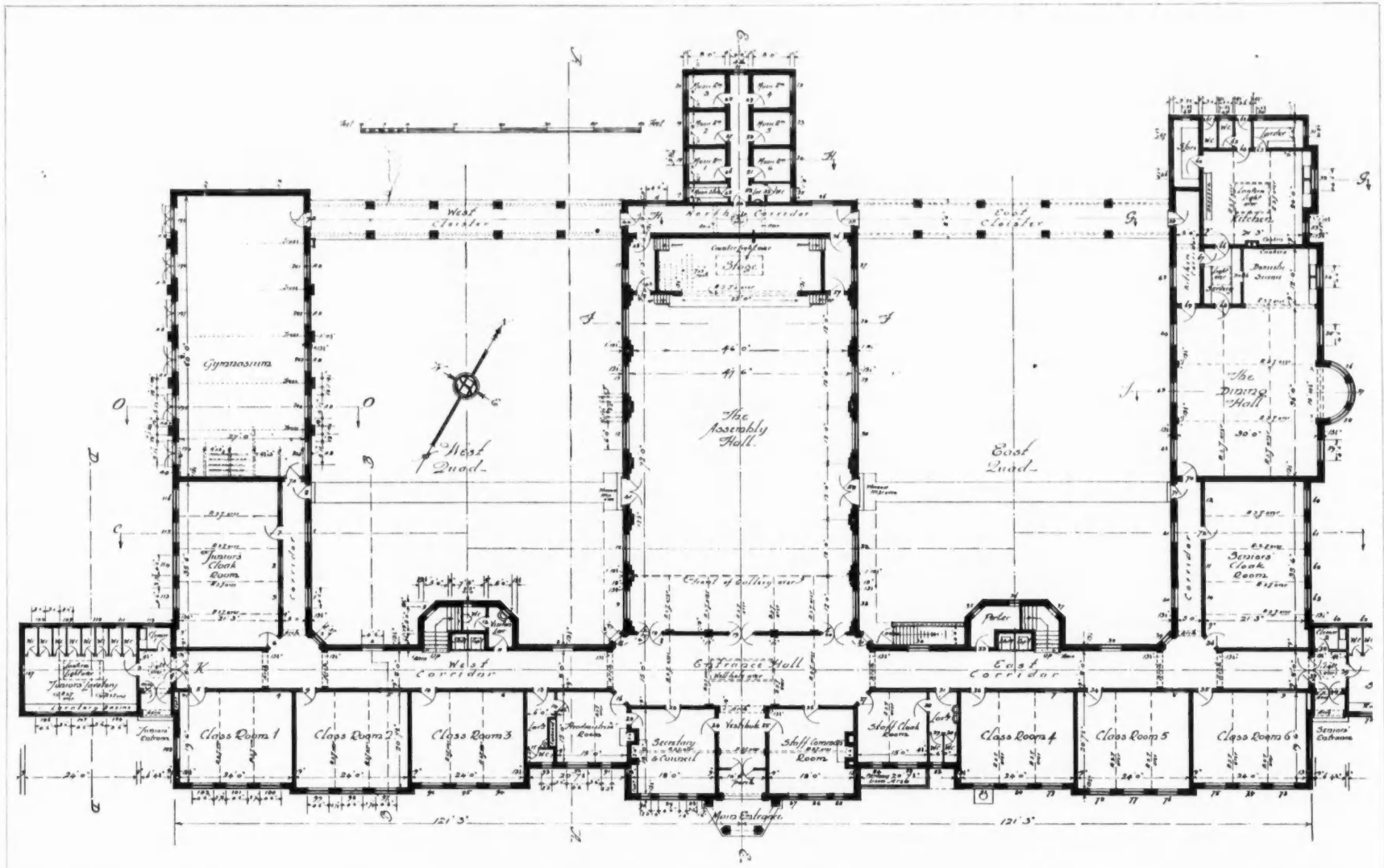
A corner of the gymnasium, which occupies the westerly corner of the site.



The interior of the library, the central apartment on the first floor. The "white horse" emblem carved in the pediment above the entrance doorway is the school book-plate.

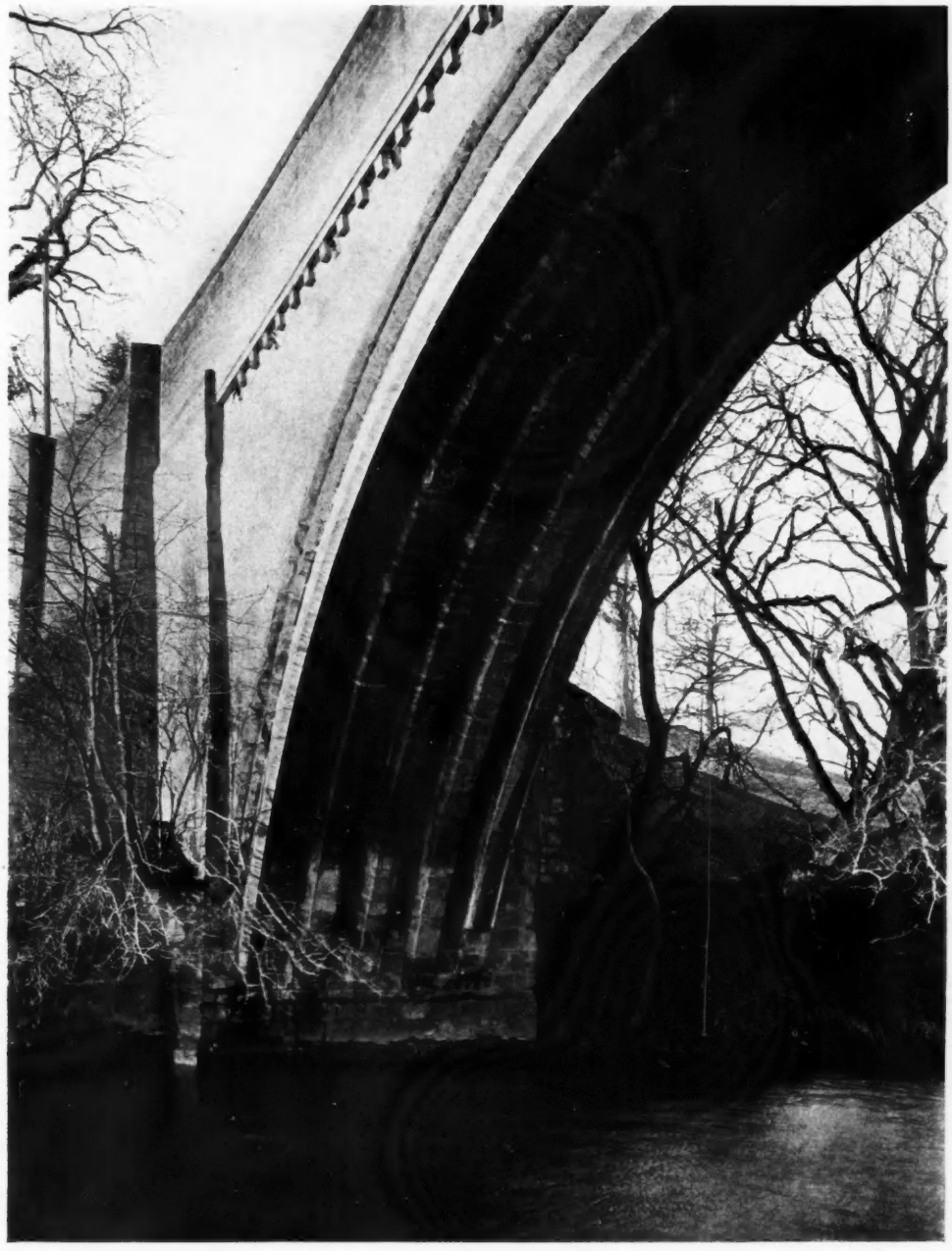


[*By Gilbert T. Gardner.*



Headington Girls' School, Oxford.] [*By Gilbert T. Gardner.*

The ground-floor plan recognizes the importance of good lighting ; there will be sunshine in practically every classroom, and it is significant that sunray glass has been used throughout. Two cloisters, running parallel with the main east and west corridors, complete the enclosure of the two quadrangles. The main feature of the upper floor is the library, centrally situated over the entrance hall and offices. In the east wing, over the seniors' cloak room, is a laboratory. North of this, and a corresponding line in the west wing, the building is only one story in height. The remainder of the upper floor is given over to classrooms, rest and medical rooms, and an art room.



ENGLISH PRECEDENT No. 120

TWIZEL BRIDGE, NORTHUMBERLAND

It is doubtful whether the present Twizel Bridge is the actual structure over which the English troops passed before the Battle of Flodden. It is said to have been erected towards the end of the sixteenth century by one of the Selbie family.

The span of the great single arch is 90 feet. The arch is of the ribbed construction which typifies the earliest form of English masonry bridge, and which, after an interval during which solid ashlar predominated, returned once more with the introduction of iron, steel and concrete.

The photographs of Medford House, Glos., the subject of last week's Precedent, were by Humphrey & Vera Joel

LETTERS FROM READERS

Priced Bills of Quantities

SIR,—A statement of Karshish in his article in the June 4 issue of THE ARCHITECTS' JOURNAL should not, I think, pass without comment. He says: "The priced bills of quantities . . . are properly kept under seal . . . as otherwise the architect is in a position to vary the contract in the interests of his client and unprofitably for the builder, by substituting work for which the builder has included a low price for that for which he has allowed a good one."

The keeping of the priced bills under seal is not so universal, I think, as this statement would lead one to suppose. Few architects, I imagine, would make variations with the specific object of robbing the builder of his profit. However, just as the merchant makes his money by buying in cheap markets and selling in dear, so the builder makes his money by doing as much work as possible at high prices and as little as possible at low. On more than one occasion I have suspected that a variation has been engineered by a builder to enable him to escape a low price, and this, from his point of view, is good business. Is it not unfair to the employer if, when such a variation is suggested by the builder, the architect has no means of seeing the reason? It seems that keeping the priced bills of quantities sealed and depriving the architect of access to them is very one-sided, if at the same time the builder has a copy in his office to which he can refer. ARTHUR J. WILLIS

SIR,—Would Karshish be so kind as to inform me whether it is the usual practice for the quantity surveyor to keep the priced bills of quantities under seal, or whether this is just a suggestion of his own?

According to him, these prices should be kept from the prying eyes of the architect in case he might pore over them, and possibly upset the builders' profit by substituting for work which has been priced at a high figure that for which a low price has been given. Furthermore, Karshish says that builders have a right to expect the bills to be kept under seal in the care of the quantity surveyor. But why? Surely the architect expects that all the items in the bills of quantities have been priced at such a figure as to allow a suitable profit to the builders for each item.

A smart estimator, on an alteration job particularly, might look round the works and note where he thinks extras may occur, and price these items high, keeping others low enough to allow a satisfactory figure for tender.

I agree with being fair to builders, but an architect should have access to the bills, and be at liberty to substitute work, if necessary, on the assumption, as I previously remarked, that the builders can carry out, at a profit, all items they have priced.

I consider that Karshish is expressing his views too strongly when he suggests that an architect would be definitely dishonest to substitute work in this fashion. W. A. DOWNE

Charing Cross Bridge

SIR,—The check to the Charing Cross Improvement Bill by the Committee of the House of Commons may provide to both the promoters and opposers of the Bill the opportunity for a mental spring cleaning. The report of the Committee has once more called attention to the dominant fact in the scheme—the railway station. Every morning several thousands of people arrive by train at Charing Cross, and every evening collect again to return. The Southern Railway agreed reluctantly to the present scheme, knowing that it was to cause them inconvenience, because it was said to aid a great Imperial improvement. Before such a grandiloquent phrase, dare one ask, *cui bono?*

From the model it would seem that £14,000,000 of public moneys are to be expended to give Londoners a second-rate copy of the Place de la Concorde. Since the electrification of parts of the old South Eastern Railway many local trains that once terminated at Cannon Street now run no farther than London Bridge. The passengers have all to find their way into the City, and the result is a further congestion in the cascade of motor buses and taxis that pour across the Thames. Exactly the same condition of things will happen with the new Charing Cross bridge. The main traffic will be the same motor bus and taxi stream that will in this case have to move in a solid stream as far as Trafalgar Square before beginning to disperse. To move the proposed station yet farther back from the river will only increase this traffic problem, and again one is tempted to ask, *cui bono?* To provide space for a monumental development of the south approach to the bridge?

Anyone who has been in the Amalienborg quarter of Copenhagen knows what gloom can surround a monumentally planned centre that is in reality no centre. Let us clear our minds of cant, and remember that the purpose of a railway station is to land people as near to their destination as possible, or at the very least at some central spot from which they can immediately radiate thither. Neither Waterloo nor the new Charing Cross will ever be required to serve the needs of that part of London in which they are situated, and ninety per cent. of the travelling public arriving at and departing from them has got to get itself transported somehow to and fro across the new bridge, which will become nothing more than a long approach to these stations.

Both New York and Paris have solved the problem—the analogy between the Gare d'Orléans and the new Charing Cross is very close, as the former is built right up to the bank of the Seine and the trains are partly underground as far as the Gare d'Austerlitz. But what need is there to transport the station at all? With electrification, nearly the whole of the suburban traffic to Charing Cross could thus be passed across the river to a submerged station on the present site.

Such a scheme would relieve the new bridge of a vast amount of unnecessary traffic, and at the same time cause the least amount of inconvenience to the public. LL. E. WILLIAMS

Electric Transmission Towers

SIR,—Although I do not always see eye to eye with my friend Sir Reginald Blomfield, I wish strongly to endorse his protest against misleading representations which have been made of steel electric transmission towers (or are they masts?) of which he wrote in last week's JOURNAL. The opposition to these had better have been focussed upon creosoted fir poles of the type used to carry telegraph wires, which also are being used for electric cables, and which are unspeakably ugly and aggressively obvious.

The braced steel masts, on the other hand, are as graceful as it is possible to conceive masts could be. Naturally, we regret when open country is traversed by roads, railways or cables, and the courses these are to follow should be scrutinized and every alternative considered; but, where it is inevitable that cables should be carried above ground, the steel masts are certainly the least offensive means: indeed they possess much grace and, in a high degree, those good qualities which are so often the products of design to fit a purpose. Let there be no misunderstanding: this is no question of *taste*, it is one of *prejudice*—prejudice against steel, prejudice against change.

Unfortunately, some of our most vigorous defenders of the countryside (to whom we owe no small debt of gratitude) are often unreasonable and frequently they oppose, not because a

thing is bad but because it is an innovation.

In saying this, I do not wish to disparage efforts to defend our countryside, but in the hope that innovations may be judged upon their merits and not condemned because they are innovations. Reasonableness will forward the object in view where ill-judged opposition will fail, even if it does not actually do harm to the cause we all have at heart. NATHANIEL LLOYD

The Economics of Steel

SIR,—Mr. Anderson's impassioned plea in your last issue for the protection of our ancient privileges and customs from the attacks of impetuous youth cannot fail to touch the hearts of all steel constructors.

Are we to surrender without a struggle this most wonderful means of enlarging our circle of friends merely in order that our customers may have their requirements more cheaply and expeditiously fulfilled? These vandals who seek to transform our time-honoured Building Acts into a simple standard of set regulations for the whole country must remember that tradition is Britain's most treasured possession and we understand that any alteration to the existing Acts will be most strenuously opposed by the Society for the Preservation of National Monuments.

No, sir, we must not allow personal feelings to be overcome by any business consideration, and let us not lament the "good old days" whilst we have the power to remain in them.

W. R. GILBERT (COMMANDER, R.N. (RETD.))

A Plea for Wood Carvers

SIR,—May I support the appeal, published in your issue of May 21, for the introduction of more wood carving? I do so because of the craftsmen and because of the craft. There is no body of men connected with architecture who are more worthy of our interest than the carvers. Even in the more prosperous pre-war days their employment was precarious and, considering their skill, study, and training, was rarely adequately paid.

Wood carving, besides being one of the most ancient of the arts, is also one of the most appreciated and valued by those who are the possessors of it, and architects often find their clients taking a considerable interest in the little carving that is being done for their building. I agree with the writers of the plea, that it would be "most regrettable if these men's hands should lose their cunning" owing to lack of demand.

Today we have to meet the requirements of an age more advanced in education and refinement than that of a generation ago. Then, both architecture and furniture demanded carving that was often cheap and inartistic; now, architects as leaders and advisers prefer to omit where the money is insufficient to provide for properly studied ornament.

It may be remarked that carvers must be more proficient to create a demand for their labour, and that the more efficient craftsmen are seldom unemployed. In agreeing, I would reply that a man rises with the opportunity and, with the heritage that inspires him from the past centuries, the wood carver will prove himself quite competent to meet any demand that may be made upon him. A. T. BRADFORD

Specialized Materials

SIR,—"Every architect will admit that the arrival on the scenes of specialized materials, in ever-increasing variety, has enormously enlarged the possibilities open to him. But that their employment brings with it certain responsibilities is not, perhaps, always clearly recognized."

It was indeed interesting to read the above paragraph on page 836 of THE ARCHITECTS' JOURNAL of May 28 last.

We are certainly of the opinion that until it is possible for the manufacturers of specialized products to reduce to a minimum all risks of faulty application, it is only natural that the benefits accruing from the use of their materials will be outweighed by the possibility of failure from this cause. We can truly say that it is our experience that architects are generally willing to adopt the principles of science to the betterment of their work, but if the need for specialized knowledge and constant supervision, so necessary in most cases to ensure success, has not been emphasized by the manufacturers, their materials will most naturally be suspect if the results are not up to expectations.

We, as manufacturers of scientifically-prepared specialist products, realized that the personal factor would enter largely into the application of our materials, and, as a consequence, did not cease our labours with the production of our material, but continued until *simplicity of application was achieved.*

We rest contented, knowing that the simple directions accompanying our material to the site can be put into practice by the contractors' usual staff without any need whatsoever of additional supervision, and that the elimination of the personal element permits of no additional responsibility falling upon the architect specifying our materials.

THOS. PARKER,
General Manager,
Chemical Building Products, Ltd.

SIR,—We have read with much interest the paragraph on page 836 of your issue for May 28, calling attention to the frequent mishandling of materials owing to the special processes which they call for not being understood.

This has been particularly the case with Eldorado cork tile flooring, so much so in fact that some years ago we had to establish our own contracting department instead of selling our material to contractors, who in many cases did not take sufficient care in installing the tiles, with the result that unsatisfactory work prejudiced many architects against any type or brand of cork tile flooring.

Our idea is that architects who have the courage to adopt new materials and processes, should be backed by the manufacturers, and that such firms should take every possible step to see that the material they manufacture and sell is properly handled and installed. Only by such means can a manufacturing concern hope to establish a successful business.

E. G. ELGOOD, Manager,
(Cork Tile Department),
Cork Insulation Co., Ltd.

R.I.B.A. ELECTION RESULT

The following result of the election of the President and Council for 1930–31 was announced at a meeting of the R.I.B.A. on Monday night:

PRESIDENT: Fletcher, Sir Banister.

VICE-PRESIDENTS: Ashley, Henry V.; Fletcher, Henry Martineau; Jones, Francis (Manchester); Unwin, Dr. Raymond.

HONORARY SECRETARY: Kitson, Sydney Decimus.

NEW MEMBERS OF COUNCIL: Buckland, Herbert Tudor (Birmingham); Cooper, Sir Edwin; Green, William Curtis; Hall, Edwin Stanley; Reilly, Professor Charles Herbert (Liverpool); Robertson, Howard Morley; Searles-Wood, Herbert Duncan.

NEW ASSOCIATE MEMBERS OF COUNCIL: Cart de Lafontaine, Lieut.-Colonel H. P. L.; Howitt, Major Thomas Cecil (Nottingham); Waterhouse, Michael Theodore.

NEW LICENTIATE MEMBERS OF COUNCIL: Hopkins, Lieut.-Colonel Percy Alfred; Rees, Major Frederick William.

PAST PRESIDENTS: Gotch, John Alfred (Kettering); Tapper, Walter.

Representatives of Allied Societies:

Northern Province of England: Tasker, Lieut.-Colonel Andrew Kerr (Northern Architectural Association); Halliday, James Theodore (Manchester Society of Architects); Abercrombie, Professor Leslie Patrick (Liverpool

Architectural Society); Harbron, George Dudley (York and East Yorkshire Architectural Society); Foggitt, George Herbert (West Yorkshire Architectural Society); Buck, Walter Gerard (Sheffield, South Yorkshire and District Society of Architects and Surveyors).

Midland Province of England: Butler, Albert Thomas (Birmingham Architectural Association); Herbert, Albert (Leicester and Leicestershire Society of Architects); Deacon, Basil Charlton (Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects); Eaton, George Morley (Nottingham and Derby Architectural Society); Buckingham, Ernest Hugh (Norfolk and Norwich Association of Architects).

Southern Province of England: Shires, Benjamin Priestley (Devon and Cornwall Architectural Society); Brakspear, Harold (Wessex Society of Architects); Hutt, Harry (Berks, Bucks and Oxon Architectural Association); Smith, John Arthur (Hampshire and Isle of Wight Architectural Association).

Allied Societies in Scotland (nominated by the Council of the Incorporation of Architects in Scotland): Balfour, Andrew (Glasgow); Begg, John (Edinburgh); Duncan, William Liddle (Aberdeen); Stewart, Donald Alexander (Dundee).

South Wales Institute of Architects: Lloyd, Thomas Alwyn (Cardiff).

Allied Societies in Ireland: Hicks, Frederick George (Royal Institute of the Architects of Ireland); Gibson, Robert Hanna (Ulster Society of Architects).

British Dominions Overseas (to be nominated by the Council of each of the following). The Royal Architectural Institute of Canada, The Australian Institute of Architects, The New Zealand Institute of Architects, The Institute of South African Architects.

Architectural Association (London): Wornum, George Grey.

Association of Architects, Surveyors and Technical Assistants: Hamlyn, William Henry.

CHAIRMAN OF THE BOARD OF ARCHITECTURAL EDUCATION: Sullivan, Leo Sylvester.

QUESTIONS THAT ARISE

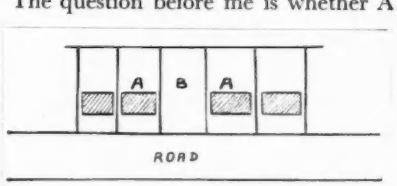
Ancient Lights

"Query" writes: "*The accompanying sketch represents building plots as laid out on an estate several years ago, and the houses shown have been erected some years. The plot B has just been bought for building purposes. Can the owners of plots A claim a "right of light" for windows in their houses overlooking plot B? The end walls of both houses on plots A are some 4 ft. from their boundaries. There is nothing in any legal documents relating to the estate or to any rights of light being acquired or otherwise.*"

I have no information before me to enable me to express a final opinion on this matter.

It appears that B has recently purchased a plot of land for the purposes of erecting a building thereon. The plot of land acquired by B is situated between two plots of land, the property of A, who has erected dwelling-houses on his land overlooking the plot which is the property of B.

The question before me is whether A has "ancient lights" so as to prevent B from erecting his house to interfere with A's right of light.



"*Can the owners of plots A claim a 'right of light' for windows in their houses overlooking plot B?*" [*See reply to* "Query."]

In the absence of agreement to the contrary between A and B or their respective predecessors in title, B has a right to blot out the whole of A's light, provided A's windows which will be affected by B's building have not been there for nineteen years and one day. (Prescription Act, 1832).

Assuming the existence of an agreement between A and B or their respective predecessors in title, or alternatively that A has acquired rights under the Prescription Act, 1832, it must be pointed out that A, although he has a right to light, has no right to an unlimited amount of light.

The quantity of light that he is entitled to depends on the facts of each case (*Colls* v. *Home and Colonial Stores* (1904) A.C. 179), and the Courts have refused to lay down any absolute standard.

To constitute an actionable obstruction of ancient lights it is not enough that the light is less than before. There must be a substantial privation of light to render the occupation of the house uncomfortable according to the ordinary notions of mankind and (in the case of business premises) to prevent the plaintiff from carrying on his business as beneficially as before. In fact, the test is not how much light is taken away by the defendant's act, but how much light is left to the plaintiff (*Higgins* v. *Betts* (1905) 2 Ch. 210. *Cavies* v. *Manable* (1913) 2 Ch. 421).

In my view, the test before mentioned is safer than the rule of thumb test known in the profession as the 45 deg. rule.

Whilst the 45 deg. rule may be a good working rule, since the decision of *Colls* v. *Home and Colonial Stores* (*supra*) it cannot be regarded as more than a guide to the Court as to what may be reasonable in normal circumstances.

E. F. I.

Profit on P.C. Items

P. C. writes: "*I should be interested to have the views of readers regarding the best way of dealing with builders' profit on provisional and prime cost items in settlement of accounts. I am at present dealing with a job where several p.c. sums have been omitted altogether, and the builder claims that he added no profit for these sums, but was content with the cash discount only. I am continually meeting with this difficulty where these sums have been reduced, but where extra amounts are involved the builder asks for an extra percentage of profit.*

"*This is all in connection with work without quantities, and the specification in all cases clearly states that the sums included are net and that the builder is to add for profit.*"

If "P. C." asks the builder to add for profit on provisional and prime cost sums he should know the amount of profit the builder desires, and I therefore suggest one of the following methods:

1. That the builders tendering should be asked to state in their tender the percentage of profit they require on these items.

2. That a certain percentage for these items should be included by the architect in the specification.

In both cases the adjustment could be easily made. SURVEYOR

Condensation on a Ceiling

R. J. writes: "*I have just erected a small one-story building, which is used as a factory, and the occupants have complained of condensation on the ceiling. The ceiling is finished in Keenes, on a backing of Portland cement, and is painted. The roof is of concrete, screeded and covered with asphalt. The asphalting was carried out by a good specialist firm and is quite satisfactory, providing an "iron" surface. What do you consider is the cause of the condensation, and is there any remedy? I am extending the building in the near future and wish, of course, to avoid this trouble.*

The condensation is undoubtedly caused through the coldness of the cement finishing to the ceiling. If the ceiling had been plastered and then distempered or whitened, the plaster

would have absorbed a certain amount of heat, during the rise in temperature in the room, and would combat the coldness coming in from the outside.

As regards a remedy, this is rather a difficult proposition. I can only suggest battening the ceiling and covering with a good ceiling board. As a precaution against condensation in a building I recently erected, where the ceiling was painted, I had 2-in. hollow tiles bedded in a weak mixture of cement and sand on the concrete flat. This was covered with breeze for falls, screeded, and finished with asphalt.

This I have found effective.

W. H. L.

Rough Cast for Walls

E. W. writes: "*Can you give me hints for making up a yellow rough cast for the walls of a bungalow I am proposing to erect? I do not wish to involve my client with the constant expense of distempering the walls externally.*"

A good lasting colouring for rough cast can be made up with the following mixture of materials:

Mix five parts of coarse sharp sand with four parts of lime putty. Add 7 lb. of yellow oxide to a 10-in. bucketful of the lime putty. Just before using, it is a good plan to add to this mixture one part of Portland cement.

This, I think you will find, makes a permanent coloured and waterproof rough cast and gives quite a pleasing effect.

H. W. M.

Damp Floor

F. H. writes: "*I recently bought an old farmhouse in Surrey, and am experiencing trouble through dampness from some of the floors. These, which are of brick, are well preserved, and only in a few small patches show signs of dampness. However, the rush matting I have laid to the floor, and even the rush seats of the chairs, feel damp, especially after the house has been shut up. While the building is in an exposed position, the walls, which are mostly 2 ft. thick, are quite dry on the inside. Can you suggest the cause and any simple cure?*"

From the description of the dampness, the cause seems to be the common one of a brick floor laid directly on the ground, the damp being drawn up into the rooms through the bricks.

An experiment I recently tried with success in a similar case was to cover the floor with asphalt ¾ in. thick, turned up against the walls 3 ins. as a skirting.

This, when polished and covered with mats, has a charming effect, and has quite cured the dampness without the bother and cost of taking up the brick floor.

S. A. T.

Settling-Up Honeywood: iv

MORE NEWS OF THE DRAINS

BY KARSHISH

(H. B. CRESWELL)

Lady Brash, the client's wife, complains of stuffy smells in the house, which she attributes to defective drains. Spinlove, the architect, is confident there is nothing wrong with them and, although Sir Leslie Brash has written formally complaining of the state of affairs and requiring immediate attention, has rather tactlessly belittled the matter.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 24/3/26.

I am gratified to know that the cause of damp in the domestics' domain has been ascertained and that immediate renovations will at once be accomplished; and I have noted your arrangements for checking Mr. Grigblay's charges.

I am, however, unpleasantly disconcerted by your reference to the question of the sanitary purity of Honeywood, which is—if you will pardon me for so expressing myself—somewhat peremptory and offhand. Of course, where domestic effluents are concerned, obnoxious exhalations are in a limited degree unavoidably to be anticipated, and I should be the last person to be unnecessarily discriminating in such a matter; but where delicate ladies are concerned—and Lady Brash's mucous membrane is peculiarly sensitive to olfactory aggression—[*we were told something like this once before*]—it is most desirably expedient that the odoriferous emanations of which I speak—and which I need not more particularly define—should be limited to the exterior atmosphere, and not permitted to invade the interior of the domicile. Lady Brash increasingly complains that Honeywood is a stuffy house, and one of our domestic staff—cook, to be precise—has described her sleeping quarters as "fuggy"—I use the word as reported to me, and may therefore repeat the expression without apology. I also understand that whiffs of a repulsive nature are from time to time encountered in various parts of the house, but though Lady Brash has on a number of occasions hurried me to the seat of an unsavoury effluvium newly discovered, I have not yet been so fortunate as to arrive on the scene of offence before dissipation has eventuated; and accordingly I am not, I regret to say, in a position to indicate a precise description of the quality of the various noxious emanations which are proving incompatible with Lady Brash's *joie de vivre* and, I fear, prejudicial to her good health. I anticipate, however, that I have, in this lengthy communication, sufficiently indicated the seriousness of the situation, and I shall be gratified to be informed that its prompt amelioration has your immediate attention.

Yours sincerely,

This letter suggests that it is not the drains that require the attentions of an expert, but Lady Brash. We must feel sorry for the poor woman, but this need not prevent us from being far more sorry for Spinlove.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 26/3/26.

I was naturally disturbed by the contents of your letter, but after reading it attentively more than once I cannot help feeling that the case is not so bad as you think, for I am convinced that the drainage system at Honeywood, both inside the house and out, is perfectly sound; and if it were conceivable that anything had gone wrong it could not possibly give rise to such a state of affairs as you describe. It is incredible that the house can be "stuffy" or "fuggy" except for reasons which may give rise to that condition in any house—such as overheating of radiators, accumulations of dust, dirty carpets, lack of ventilation, etc.

I will, of course, give the matter my particular attention and do my best to discover the reason for the complaint, but I shall not be able to spare a day before the end of next week. In the meantime perhaps you will be able to find the true source of the unpleasant conditions, which certainly can have no connection with drainage.

With kind regards,

Yours sincerely,

Spinlove is not happy in the wording of the sentence in which he seeks to discredit the idea that the house can be stuffy.

SPINLOVE TO GRIGBLAY

Dear Sirs, 26/3/26.

I enclose a letter I have received from Sir Leslie Brash. I have had previous complaints of smells in the house. As I cannot go down for a fortnight and have no time to waste and you have work going on in the neighbourhood, I will ask Mr. Grigblay to take an early opportunity of calling at Honeywood and to let me know

what he makes of it all. Perhaps he will be able to see Lady Brash and establish her peace of mind, which I have, unfortunately, not been able to do. You will remember there was the same kind of trouble over the smell of the new oak when the house was being built. They may have been over-stoking and keeping the radiators too hot.

I note that waterproofing of chimneys will have to stand over till the summer.

I still have not yet received your summary of variations account.

Yours faithfully,

The stuffy, close, stale air associated with radiators is due to the hot iron causing the paint on it, and on adjoining surfaces, to smell until it has thoroughly dried up, which, in the case of oily paints, takes some time; and also to the rising currents of air carrying up dust particles with it. There is, rightly speaking, no such thing as "scorched air," though the term is sometimes used as an explanation of these unpleasant associations of radiators. Radiators, however, only in part warm by radiation; a great part of their heat is disseminated by convection, and the repeated circulation of the same air against the heated iron dries it and vitiates it. Many heating systems by hot-water radiators are enervating and dispiriting to live with. These conditions are much aggravated when the radiators are allowed to get above a certain temperature, and are remedied by good ventilations.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 30/3/26.

Your communication encourages optimistic anticipations, though you must allow me to intimate the suggestion that it is not reasonably consistent with what you previously indited to Lady Brash. You must permit me, however, to object most strongly to the astounding suggestion that the conditions I complain of are due to improper neglect of cleanliness at Honeywood. The house, I must beg permission to inform you, is *not* unventilated, dusty and dirty, and I am amazed that one from whom I have learnt to anticipate polite behaviour on all occasions should so far forget decorum as to offer any such monstrous explanatory solution of the matter in complaint.

That the house is stuffy, and impregnated with obnoxious effluviums of some kind, there is abundant evidence to substantially prove. The source of the annoyance, which is a danger to health, is for you to definitely determine, and for Mr. Grigblay to curatively ameliorate without delay.

Yours sincerely,

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 2/4/26.

I assure you that you entirely misread my letter. I admit that my wording was ambiguous, but I had no intention of suggesting what you suppose. My argument was that a defect in the drains could not possibly give rise to the conditions you describe; that such conditions were such as would be occasioned by overheated radiators, dust, lack of ventilation and so forth and that—*as you knew* these conditions did not exist at Honeywood—the explanation *must lie in some other direction.* That is all I meant to say. It never entered my head that you would suppose I could mean that Honeywood was in such a condition; and *if* I had supposed it *was*, I should, of course, have been much more careful not to let you think I thought so. [*Spinlove is not improving matters by this extreme frankness.*] Please accept the will for the deed. [*The finishing touch!*]

I do not know what more I can say until I come down to investigate for myself. That cannot, however, be immediately, as I have to go out of town on business, but I will get in touch with you as soon as I can manage next week.

With kind regards,

Yours sincerely,

This letter is a wretched performance. Spinlove not only says a great deal too much, but makes it appear that his offending letter was written in the belief that his explanation of the "noxious emanations" was, in fact, the true one. He then indicates that he does not consider the matter of any pressing importance, and, by making plain, with characteristic tenacity, that he regards the whole thing as a mare's nest, he returns, like a fly, to the bald place from which Brash has just driven him.

GRIGBLAY TO SPINLOVE

Sir, 6/4/26.

I had a chance yesterday and called at the house to examine into all these effluviums and emanations and other polite stinks that are going about, but can make nothing of it. Every house, in my opinion, has its own smells, different in different houses, if you sit down and wait for them. There were only two real Oh Mys at Honeywood on Tuesday: one was Lysol and the other was her Ladyship, who was carrying so much scent that though I have as good a nose as most it had ought to be forty feet long to reach anything else when the lady was by. She had such a lot of things, too, to tell me that it was difficult to find out anything for myself. The plumbing everywhere is a picture to see; there never was a better job. Rumble was on it, and he's a craftsman if there ever was one: it's a pleasure to look at his wiped joints. No spigotting anywhere, you may be sure, no rubber cones; solid lead tacks wiped on front angles and screwed and plugged, all joints between lead and iron or stoneware made with brass thimbles—beautiful; but you know all about it, sir, having ordered and saw the work being done.

All I could get at was that the bedrooms smelt funny, and the scullery—and why wouldn't that smell, I should like to know? There was an intelligent young girl there who had taught herself how to pull the cobweb grating out of the wash-up, and there she was with a bit of telegraph wire with a sharp burred end to go pushing into the trap when it gets blocked every half-hour and cut a hole in the lead before anyone has time to discover what a clearing eye is for. They had hung up this grating and the key of the back door, so that they shouldn't be wasted, to keep the clock going, because the weight had been lost plumbing the rain-water well.

There was talk that a smell came in at the window; so I told this same slut if you don't like stinks you shouldn't make them, for she had the grease trap outside all clogged and mucked up with kitchen filth, the container not having been emptied all the time they've been there—nor never would be if I hadn't noticed. That gully by the back entrance was flooding over. They had taken the grating out and broke it with a sledge-hammer in case someone should remember what it was for, so as to make it easy to pour down the water they wash the floors with, without the trouble of taking scrubbing-brushes and clouts out of the bucket first. That was what Jossling found stopping the trap when I told him get it cleared, along with a vacuum-cleaner fitting and a few other trifles that wouldn't be missed. That is all I could find wrong with the drains; but it's none of her business, says cook, and the chauffeur says it is none of his, so there you are! and we shall have more complaints before long unless Sir Leslie is told what is going on.

As for the smell in the bedrooms it is difficult to say. The cook had a lot of complaint and said it gave her asthma. It will give you whooping cough, I told her, before ever it will give you asthma, and I think she feels more contented now; but there certainly was a close, stuffy smell in the fifth room on the second floor, in particular, though it had never been used; and my opinion is that smoky air from outside is drawn down the chimneys by the pull of other flues, or perhaps it's down-draught. These damp flues where the rain beats into them would be likely to lead to that kind of trouble.

There was a close air in three other of the maids' rooms that was not accounted for by the windows being shut, nor yet by two towels and a newspaper pushed into the chimney-throat of one of them to plug it in case of ventilation. Her Ladyship says her own room on the first floor is very stuffy; I could not notice anything, but, there you are! I am not in the perfumery myself, and a musk-rat or a civet-cat or whatever it is, spiced up with a touch of Lysol—which is about in saucers and everywhere it has no occasion to be—smells to me after half an hour pretty much like badger. Her Ladyship uses the Lysol so she won't notice the drains, and the scent so she won't notice the Lysol, which is a queer way to go to work if you ask my opinion.

However, I told the lady I could find nothing wrong except perhaps some down-draught in the chimneys, and that everything would be all right in the summer. She seemed satisfied and was very grateful and friendly and had lunch specially served to me though it was early; so I hope we shall have no more old tommy-rot about the drains.

I am sir,

Yours faithfully,

The erratic script of this letter, conjoined with Grigblay's authentic voice, indicates that he typed it himself. We may well suppose that, if persuasion of any kind could do so, his massive resources consoled Lady Brash. Grigblay, however, here definitely oversteps the mark. He takes a great deal too much on himself: he involves Spinlove in a kind of disloyalty to his client, and the extreme intimacy of his facetiousness is subversive of discipline and, definitely, not allowable, but—as Grigblay would say—"there you are!" Spinlove has allowed himself to look to Grigblay for direction in a degree which a more substantial individuality would not tolerate.

SPINLOVE TO GRIGBLAY

Dear Sirs, 10/4/30.

I am much obliged for Mr. Grigblay's report on drains, etc. Things are very much as I supposed. I have written to Sir Leslie Brash calling attention to his servants' neglect, and have no doubt the complaint of bad smells is now disposed of. Please fix the sink grids. I do not understand how that in the scullery could be taken out.

Will you let me have your final statement of account without further delay? I have several times asked for this.

Yours faithfully,

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 10/4/30.

I came back to the office today to find awaiting me a long report from Mr. Grigblay, who in my absence and at my orders made a thorough investigation into the cause of the smells complained of, as no doubt you may have heard. He finds the "closeness" of the bedrooms to be due to the windows being kept shut, and also, perhaps, to slight down-draught carrying smoky air down the chimneys. This is due to the stacks being damp, and will disappear when the summer comes. The chimney-throat in one of the servants' rooms was found to be stopped up. This should be discouraged, as the flues ought to be open to ventilate the rooms.

Mr. Grigblay, however, found a most insanitary state of affairs, productive of bad smells, in the scullery; due, not to any fault in the drainage arrangements or defect in the work, but to the neglect and deliberate ill-usage of the appliances provided, by your servants. The grating of the sink waste has been mischievously forced out so that the trap gets choked with filth; and this is cleared by violently ramming a steel wire down and damaging the pipe, instead of removing the screwed eye provided to make such ill-usage unnecessary. Then the grease trap into which the sinks discharge has never been once emptied; and as a consequence the whole thing is clogged with congealed fat and stinking filth, and allows grease to get into the drain which it is the special purpose of the device to prevent. The iron receptacle in the gully should be lifted out and emptied once a week. In addition to this, the gully by the yard entrance has had its grid removed and deliberately broken, and a scrubbing brush and floor clouts and other things had been thrown into the drain, stopping the trap and flooding the yard with sewage.

I was certain, as I told you, that there could be nothing wrong with the drains, and Mr. Grigblay's report is very much what I expected. If the servants are told to use the fittings and arrangements as they are intended to be used, the smells you complain of will cease.

I am very glad to be able to give you this definite assurance.

With kind regards,

Yours sincerely,

Spinlove so stresses the facts as to overweigh them; and it is not tactful in him to triumph over Brash with cock-crows of "I told you so," and to remind him of his fault by rubbing his nose in it: nor is it tactful in him to appear enormously relieved in being able to give the explanation: for great relief can only be a reaction from great anxiety, and Brash will suppose Spinlove to be concerned for Honeywood's drains, when it is Honeywood's brains that are worrying him. This drain-trouble appears to be entirely of Spinlove's making. If he had written the brief, compact letters of a confident man, instead of the diffuse ones of a man anxious to appear plausible, Brash would have been fortified against his wife's complainings, and the lady, perhaps, herself assured. He is wrong in supposing that emphasis carries conviction; the opposite is true. "I saw Jones at Brighton" is more conclusive that Jones was there than: "I am certain I saw Jones at Brighton," and much more so than: "I am absolutely positive . . ."; and it is only fatuous writers of advertisements who use superlatives that suppose otherwise.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 13/4/30.

I am astonished to be informed of the improper neglect to observe the sanitary amenities on the part of the kitchen staff, and have emphatically directed that it shall cease forthwith. It is scarcely necessary for me to signify that it is not incumbent upon me, as master, to keep myself personally acquainted with the conditions obtaining in the purlieus of the establishment; but I have now expressed my disapproval of past procedure in suitable terms to the person I hold to be responsible, and I confidently anticipate that no repetition of the previously objectionable circumstances will be repeated in the future.

You must permit me to express, however, that I fail to see how irregularities in the culinary domain can account for consequent olfactory intrusions in the sleeping quarters, nor do I comprehend in what way a down-draught in the chimneys can be applicable to the question of sanitary purity. I desire, therefore, that you will transmit Mr. Grigblay's report anent the matter of which I am speaking, so that I may be enabled to acquaint myself with the signification of your communication in more exact detail.

Yours sincerely,

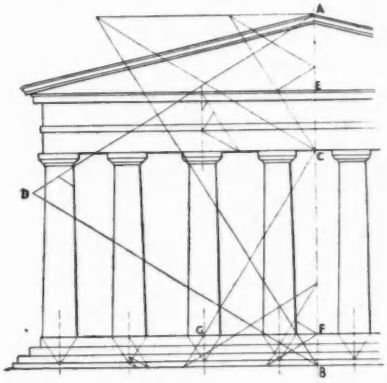
If Brash saw Grigblay's letter the fat would, indeed, be in the fire!—which is proof that Spinlove should not allow such letters to be addressed to him. An architect should be able at any moment to lay all correspondence dealing with his client's business freely before him—in fact, the client has right of access to such correspondence, and also to possession of the whole of it after the work is completed. This follows necessarily from the relation of Agent and Principal which subsists between them. It is clear that Spinlove cannot do what Brash asks; and, even if there were no other reasons, Grigblay's letter, though it is not so marked, is clearly a confidential or private letter.

[NEXT WEEK: V—DEFECTS ARE REPORTED]

THE PARTHENON AND THE SET SQUARE

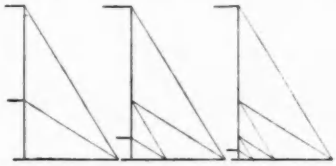
BY H. W. ROBERTS

THE more one studies the Parthenon, the more one is impressed with its amazing simplicity and beauty. In a recent book Sir Reginald Blomfield writes: "That the Greeks had a system of their own; that they worked to definite ratios of dimension and numbers and employed graphic methods of determining their proportions, such as the use of triangles and the like, to arrive at the limits of their design, seems certain."



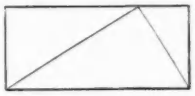
The present article describes an attempt to determine the proportions of the Parthenon by means of the set square. The sides of the set square containing the right angle are in the ratio of 5 : 8 or 8 : 13, a proportion taught by Owen Jones nearly sixty years ago, a proportion known in the Middle Ages as the Fibonacci Series; the Divine Ratio of Leonardo da Vinci as the Golden Cut; and known to the Greeks and Romans as extreme and mean ratio.

This golden cut set square has base to altitude in the ratio of 1·000 : 1·618, and this proportion can be most aptly arrived at by drawing the high slope and the low slope from the opposite angle up to the altitude or tangent.

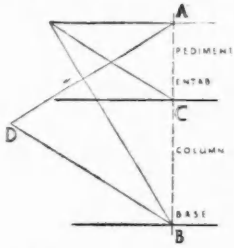


By using this set square it is an easy matter to obtain a close approximation to the Parthenon. By "approximation" I mean a result so similar that one hesitates to say which is the true representation of the Parthenon when it is compared with the most careful and truthful scale drawing.

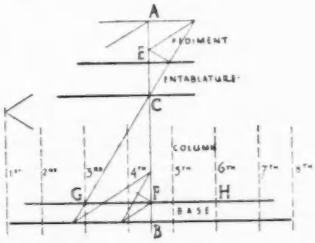
Having either the width 101·33 or the length 228·14 the set square applied in this manner gives the plan of the top step.



Then for the end elevation draw a vertical line AB 64 ft. high to any scale. The golden cut gives C the bottom of entablature; from ends of A and B draw low slopes to cut at D the full width of corona of cornice.

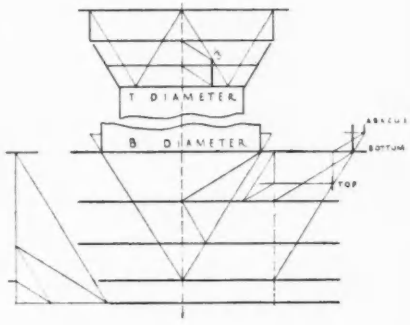


On AC use the golden cut; then slope line in opposite direction to get the point E, the top of entablature. On vertical CB take the golden cut, and then golden cut of the smaller part to get F the top of base, or stylobate; this also cuts at point G, the centre of third column; the point H, centre of sixth column, is got in similar manner; GH can now be divided into three equal parts to get centres of fourth and fifth columns; centres of second and seventh columns can be fixed at same widths; a low slope line from F will cut low slope line from A at centre of first column; the end columns are nearer together at each corner of the building.

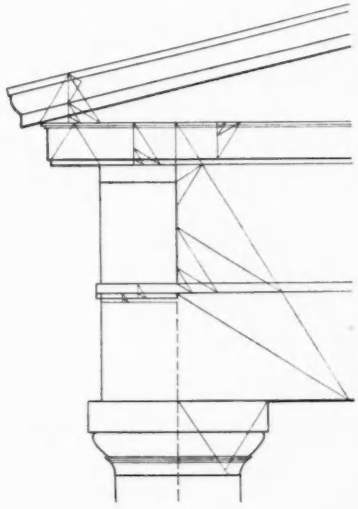


To half-inch scale draw vertical line 6 ft. high, apply golden cut, then golden cut of smaller part to get height of small bottom step. From this height draw V form; take golden cut of this vertical for depth of top step; then divide remainder into two equal parts for second and third steps; the ends of the V form will be the bottom diameter. Divide height of top step into the golden cut; then a horizontal line through this tick will give the top diameter; from end of this line draw vertical, then low slope and get the full width of abacus.

Continue the vertical line and at convenient point set off the widths of abacus; draw two V forms to get bottom of capital; take one-third of this height and transfer by low slope lines on to vertical, and get divisions of capital; draw verticals for ends of abacus and tick the width of top diameter and draw slope lines to indicate form of echinus.

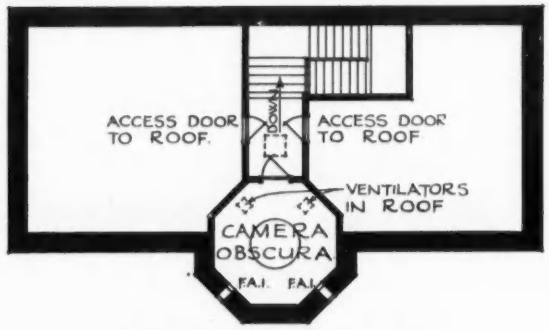


To half-inch scale draw vertical line 11 ft. for depth of entablature; the

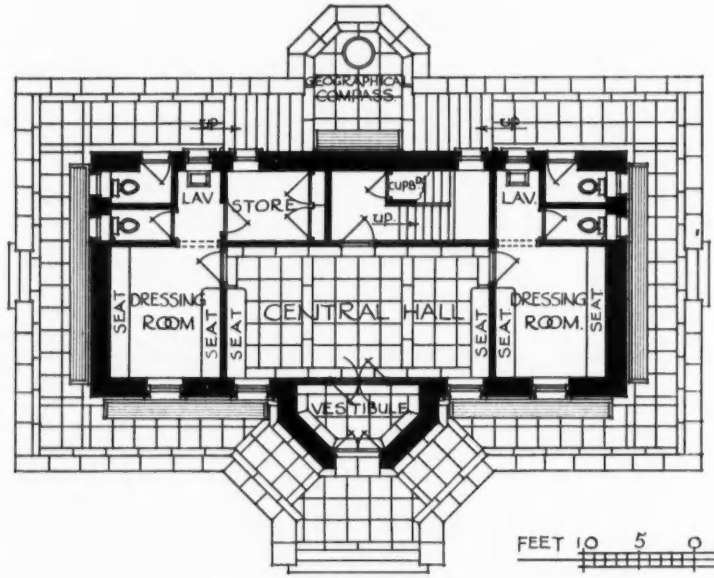


golden cut gives height of architrave; the golden cut of the golden cut of the golden cut gives tenia band. The cornice is one-third of frieze; its bottom member is the golden cut of golden cut; the moulding at top is the golden cut of the golden cut of remainder; the projection is got as shown and the mouldings on pediment will be now easily understood from the detail. These large-scale details show the method of arriving at each part.

SPORTS PAVILION KIRRIEMUIR HILL.



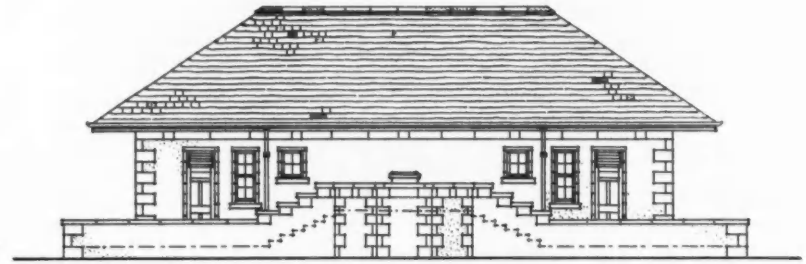
FIRST FLOOR PLAN



PLAN



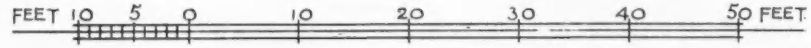
CROSS SECTION.



WEST ELEVATION.



FRONT ELEVATION.

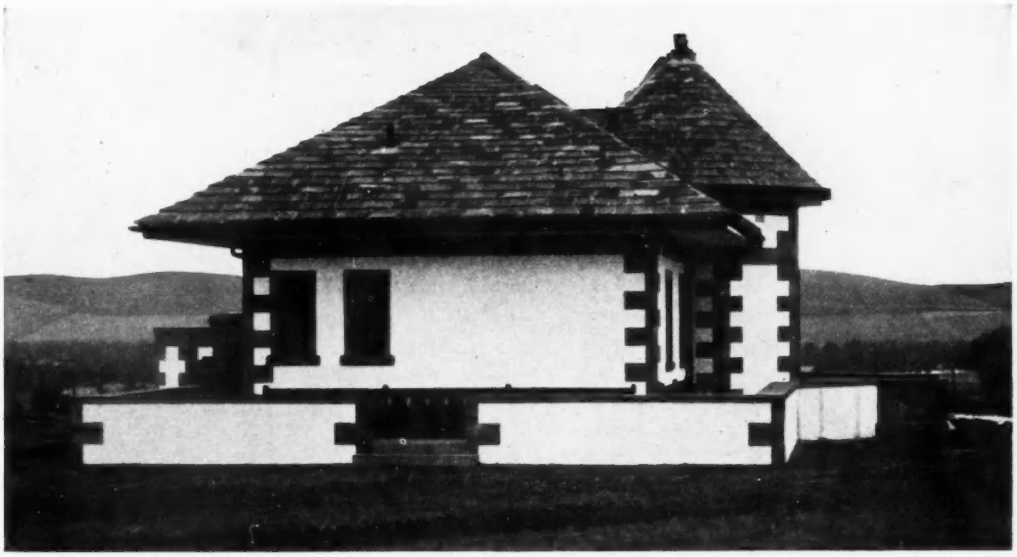


FRANK THOMSON
ARCHITECT.
11 NETHERGATE
DUNDEE. AUG. 1929.

Ground- and first-floor plans, elevations and section. On the ground floor is a central hall, 24 ft. long by 12 ft. wide, on either side of which are dressing-rooms, measuring 12 ft. by 10 ft., and lavatory accommodation. On the first floor is the camera obscura. A geographical indicator of surrounding eminences is provided on a raised platform on the veranda.

SIR JAMES BARRIE'S SPORTS PAVILION

DESIGNED BY FRANK THOMSON



A view of the pavilion from the south. The walls are of local stone, harled, with local stone dressings. The roof is covered with grey stone slates.

ON Saturday afternoon, June 7, Sir James Barrie, Bart., O.M., opened the sports pavilion at Kirriemuir Hill, which he has gifted to his native town. When the design, selected from the competitive plans submitted, was forwarded to the donor, he returned it with the nappy suggestion that a camera obscura should form part of the building, as "it would provide a great deal of amusement, especially to the young." It is probably the only one in the world on a sports pavilion.

Sir James's idea of the building which in his opinion would be suitable for the site was thus expressed by himself: "It should not be ornate or call attention to itself, but should be something that settles down quietly as belonging to the Hill. A Kirrie Building, not something from the outside."

The pavilion stands to the west of the cricket pitch on the top of the Hill (631 feet above sea level). The camera obscura is placed in the roof over the entrance vestibule and is approached by a staircase from the back of the central hall. Magnificent views are obtained from Kirriemuir Hill.

A geographical indicator is provided in the veranda, giving the height and distance of twenty-eight hills, the principal ones being: Ben Ledi, 2,875 ft.—58 miles, 165 yds.; Ben Chonzie, 3,048 ft.—40 miles, 1,540 yds.; Ben Lui, 3,708 ft.—71 miles, 1,045 yds.; and Ben Lawers, 3,984 ft.—47 miles, 660 yds.



[*Photos., D. M. Laing.*

The main (east) elevation. The pavilion stands on the top of Kirriemuir Hill, and has been specially designed to provide uninterrupted views towards the surrounding hills. The camera obscura, the head of which is seen at the apex of the octagonal roof, was installed at the suggestion of Sir James Barrie.

D

THE SKETCH CLUB
FIFTH SESSION

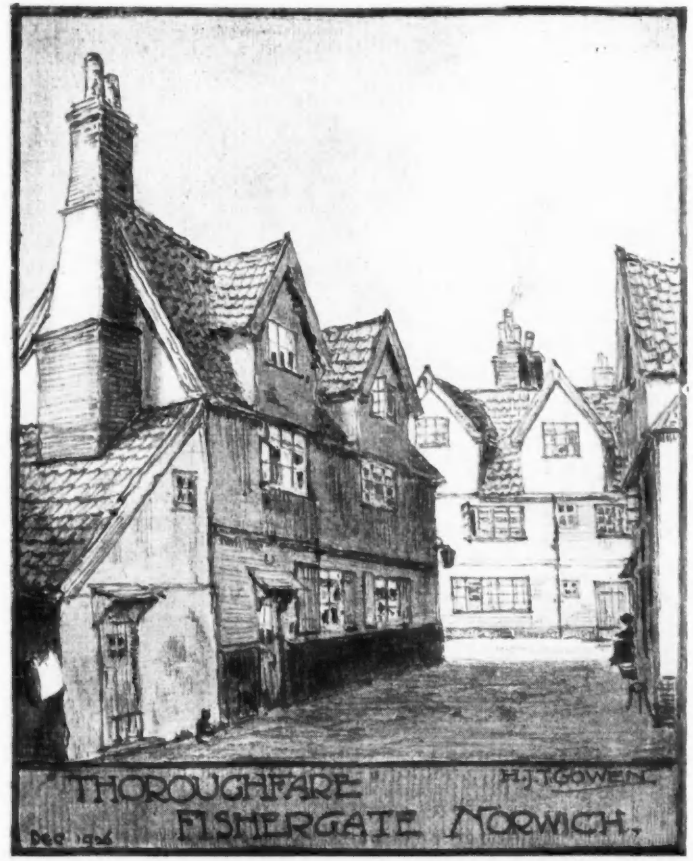
IT is natural that the insidious infection of sketching should be rife in Norfolk, that county most susceptible to the architectural sketcher. The Sketch Club's hanging committee has had no easy task in selecting the examples now presented.



St. Germyns, Wiggenhall (on the Gt. Ouse, near King's Lynn.)
By C. Upcher. (Pencil.)

SAMSON and Hercules House can be traced back to 1657, when Christopher Jay, mayor, acquired what may have been the Duchess of Suffolk's town mansion. Samson's figure (left) is original, like the door; that of Hercules is more recent and less impressive. Bishop Bridge, probably built at the expense of Richard Spynk, a notable citizen, about 1343, together with a gateway, over the west approach (removed, through weakness, in 1790) formally passed from the priors to the city in 1393. E. H. B.



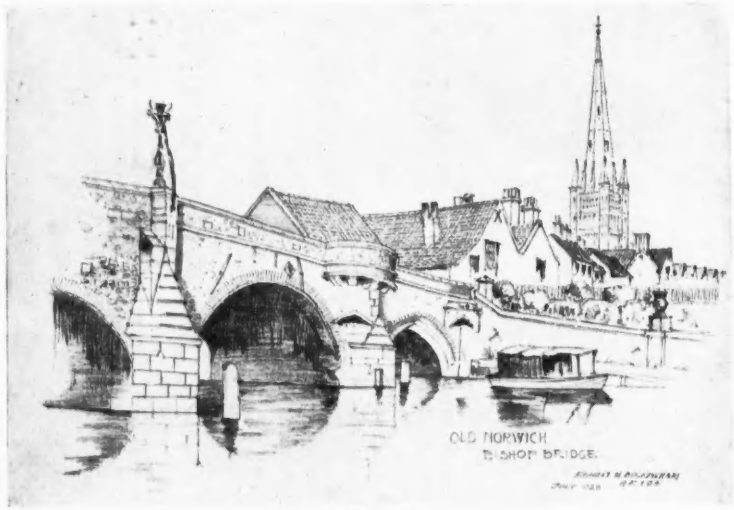




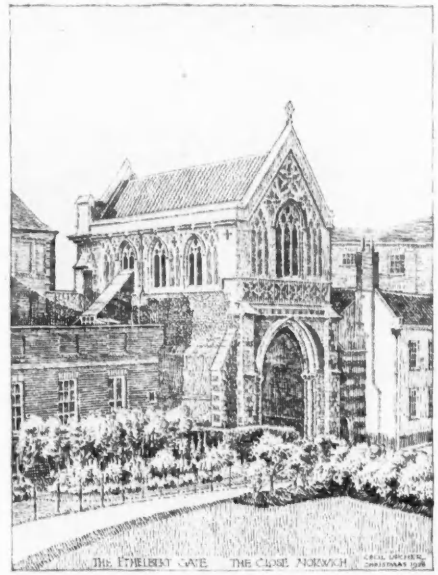
Wells-on-Sea, Norfolk (between Cromer and the Wash).
By C. Upcher. (Pencil.)

THE Ethelbert Gateway, leading from Tombland to the Upper Close, is an Early Decorated building, and represents part of the fine imposed on citizens for the riots of 1272, when many monks perished. Pulls Ferry, at the extreme east end of the Close, leads out of it across the River Wensum. The old flint and stone archway is the ancient water-gate to the Precincts. Up a water-way that used to run inland, here, stone for the cathedral is said to have been brought. C. U.

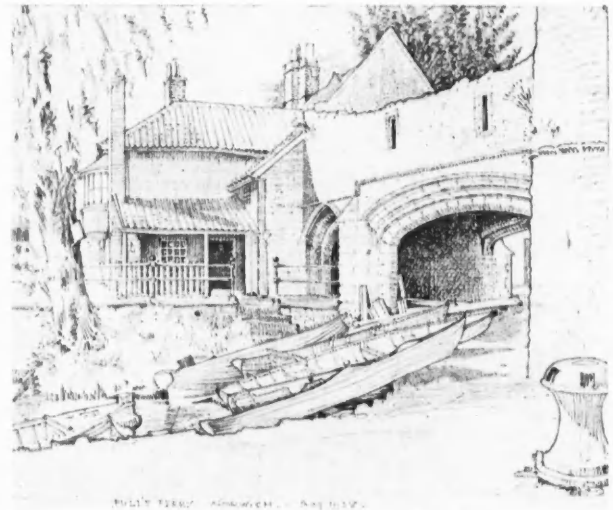




(Pencil.)



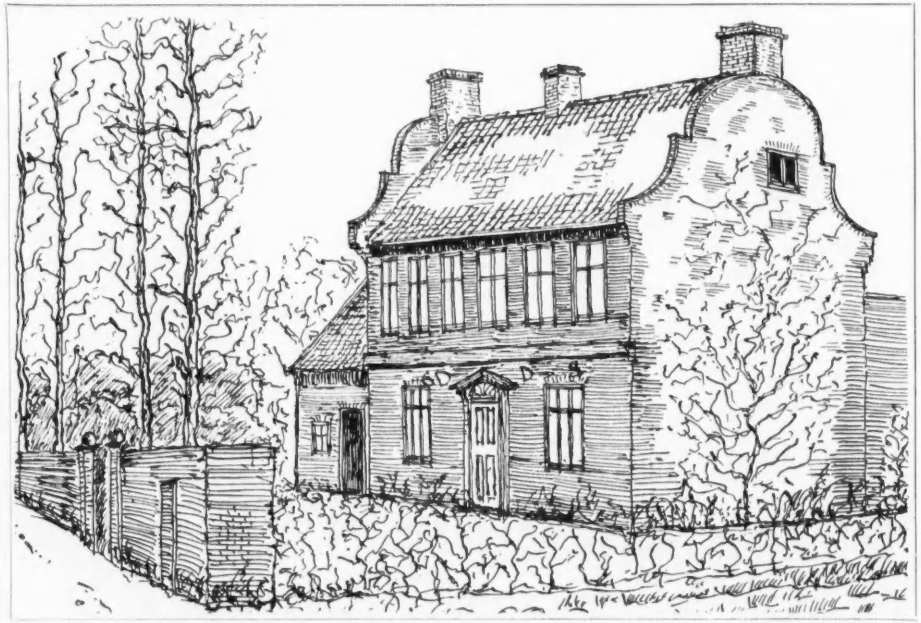
(Pen and ink.)



[*By C. Upcher* (pencil).



Georgian Shop Fronts, main street, Castle Acre, near Swaffham, Norfolk.
By Claude J. W. Messent (pen and ink).



Walnut Tree Farm, Ludham, near Horning, Norfolk.
By Claude J. W. Messent (pen and ink).

SOCIETIES AND INSTITUTIONS

R.I.B.A. COUNCIL MEETING

FOLLOWING are some notes from a recent meeting of the R.I.B.A. Council:

Sir Edwin Cooper's Election to the Royal Academy. The cordial congratulations of the Council were conveyed to Sir Edwin Cooper on the well-merited honour conferred on him by his election as an Associate of the Royal Academy.

The Fees for the R.I.B.A. Statutory Examination and the R.I.B.A. Examination for Building Surveyors. On the recommendation of the Board it was decided to abolish the fee of £3 3s. in connection with the issue of the Certificate of Competency and that the examination fee of £3 3s. should in future include the examination and the issue of the Certificate of Competency.

Deputy Hon. Secretary, R.I.B.A. for Western Australia. Mr. A. R. L. Wright, L.R.I.B.A., was appointed deputy Hon. Secretary, R.I.B.A. for Western Australia.

The Court of Governors of University College, Hull. Mr. F. J. Horth, F.R.I.B.A., was appointed to represent the R.I.B.A. on the Court of Governors of the University College of Hull, in place of Mr. John Bilson, who has retired owing to ill-health.

The National Association for the Prevention of Tuberculosis. Mr. H. M. Fairweather, F.R.I.B.A., was appointed to represent the R.I.B.A. at the sixteenth annual Conference of the National Association for the Prevention of Tuberculosis, which will be held in London from 3rd to 5th July.

The Thames Bridges Conference. Professor A. E. Richardson, F.R.I.B.A., and Mr. W. Harding Thompson, F.R.I.B.A., were appointed as members of the Thames Bridges Conference.

Revision of Ordnance Maps. Mr. W. Harding Thompson, F.R.I.B.A., was appointed to represent the R.I.B.A. at a conference called by the Town Planning Institute to urge the bringing up to date of ordnance maps.

British Engineering Standards Association: Conference on the Standardization of Gypsum Plaster. Messrs. W. E. Vernon Crompton, F.R.I.B.A., and Alan E. Munby, F.R.I.B.A., were appointed to represent the R.I.B.A. at a conference called by the B.E.S.A. to consider the standardization of gypsum plaster.

The Daylight Illumination Sub-Committee of the National Illumination Committee of Great Britain. Mr. P. J. Waldram, L.R.I.B.A., was appointed as the R.I.B.A. representative on the Daylight Illumination Sub-Committee of the National Illumination Committee of Great Britain.

The Fellowship. The Council, by a unanimous vote, elected Messrs. W. G. Allen and W. L. Duncan to the Fellowship.

Membership. Nominations for membership were approved as follows: As Fellows, fifteen applications; as Associates, fourteen applications.

Reinstatement. The following ex-members were reinstated: As Fellows, Messrs. John Coulson Nicol and John Robert Sutton; as Associate, Mr. Cyril John Crossman.

Students. The following probationers were elected as students of the R.I.B.A.:

Dillon, C. J. (Architectural Association).
Good, N. D. (Architectural Association).
Goodden, R. Y. (Architectural Association).
Haswell, G. J. W. (Northern Polytechnic).
Hunt, R. D. (Architectural Association).
McLaughlan, C. P. (Northern Polytechnic).
McLean, C. R. (Special Exemption).
Marlow, A. F. (University of London).
Maw, G. M. (Northern Polytechnic).
Morrison, A. J. W. (Edinburgh College of Art).
Prior, J. F. (Northern Polytechnic).
Richardson, R. J. (Liverpool School of Architecture).
Robin, A. A. (Glasgow School of Architecture).
Robinson, G. D. (Birmingham School of Architecture).
Rosser, C. (Welsh School of Architecture).
Sein, M. T. (Architectural Association).

ROYAL INCORPORATION OF ARCHITECTS IN SCOTLAND

At the annual convention of the Royal Incorporation of Architects in Scotland, held in Aberdeen, Mr. John Watson was formally elected president and installed in office.

The report of the Council showed that during the past year seven Fellows, eighteen Associates, and twenty-two students had been elected; thus bringing the total membership, including affiliates, up to 833.

The following were elected representatives to the R.I.B.A. for the next session. Messrs. P. H. Thom (Dundee), William Williamson (Kirkcaldy), and James Lochhead (Hamilton).

Messrs. W. L. Duncan (Turriff), D. A. Stewart (Perth), John Begg (Edinburgh) and Andrew Balfour (Glasgow)—four members of affiliated societies in Scotland—have been elected to the R.I.B.A. Council.

The Rowand Anderson medal and scholarship of £100 was awarded to Mr. Hugh S. MacDonald, College of Art, Edinburgh; and Mr. G. A. Cassells was awarded a certificate and £20. The Rutland Prize—certificate and £50—was won by Mr. G. D. Hardie. Mr. J. W. Laing was awarded the Incorporation prize for third-year students.

OXFORD ARCHITECTURAL SOCIETY

The annual meeting of the Oxford Architectural and Historical Society was held recently in the Ashmolean Museum. Professor J. N. L. Myres, vice-president, occupied the chair.

Professor Myres stated that twenty-eight new members had been elected during the year, compared with forty-two in the previous year. The Society had continued its activities in promoting the welfare of objects of architectural and historical interest in Oxford and the neighbourhood.

The statement of accounts showed a balance of £70 18s. 9d.

The following members were elected as officers: President, Rev. H. E. Salter; Vice-president, Prof. F. M. Powicke; Auditors, Rev. Canon Watson and Mr. Madan; hon. treasurer, Mr. L. Stampa; hon. librarian, Mr. C. F. Bell; hon. secretaries, Prof. J. N. L Myres and Miss M. R. Toynbee. Committee: Miss Taylor, Miss Hamilton, and Messrs. R. G. Collingwood, D. B. Harden and J. H. Le Patourel.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Proposed Willingdon By-pass

IN the House of Commons Mr. Ede asked the Minister of Transport whether he was aware that the proposed new main road to Eastbourne was designed to cut through the village of Willingdon, destroying the oldest and most beautiful part of it, and whether he was prepared to consider representations on the matter.

Mr. Morrison said he was aware of the circumstances connected with the proposed Willingdon by-pass and of the alternative proposals which had been put forward. His approval of the County Council's proposals followed upon a local inquiry held last February. He was not aware that any fresh considerations had arisen, and he should deprecate any further delay in proceeding with the work. In the circumstances, he did not think that any useful purpose would be served by his hearing further representations in the matter, but he must not be taken to admit Mr. Ede's description of the effect of the scheme.

The Government's Slum Bill

During the consideration in Standing Committee "A" of the House of Commons of the Housing (No. 2) Bill an interesting discussion took place on an amendment, moved by Dr. Vernon Davies, to Clause 22, to provide that a local authority, in preparing proposals for the provision of houses in its area, shall have regard to the natural amenities of the locality, and that no works of architectural, historical or artistic interest shall be destroyed without the consent of the Minister.

COMPETITIONS OPEN

July 1.—The Isle of Man Education Authority invites architects to submit competitive designs for a new Grammar School at

Ramsey, Isle of Man. Assessor, T. Taliesin Rees, F.R.I.B.A. Particulars, etc., are obtainable from T. R. Lewin, Clerk of the Authority, Education Office, Strand Street, Douglas, until July 1. Deposit £1 1s. Latest date for submission of designs : September 30.

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thomas, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor : H. V. Ashley, F.R.I.B.A. Premiums : £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs : July 5.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall, which is to be built on the site of the old town hall at an approximate cost of £250,000. Assessor : Sir Brumwell Thomas, F.R.I.B.A. Premiums : £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs : July 31.

July 31.—The Dudley Education Authority invites architects having an office within a radius of fifteen miles of Dudley to submit competitive designs for a Council school to accommodate 320 children, to be erected on the Brewery Fields estate; also a school for 400 children on the Priory estate. Assessor : Herbert T. Buckland, F.R.I.B.A. Premiums : £150, £100, and £50. Applications for conditions of the competition, etc., should have been made to J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley, by April 30. Deposit £1 1s. Latest date for submission of designs : July 31.

September 1.—The Bangor (Co. Down) Borough Council invites architects or town planners to submit designs in competition for laying out the sea front within the Borough. Assessor : Professor Patrick Abercrombie, F.R.I.B.A. Premiums : £150 and £50 for first and second places, respectively. Copies of the conditions and plans will be forwarded on application to J. Milliken, Town Clerk, Borough Council Offices, Bangor, Co. Down. Deposit £1 1s. Latest date for submission of designs : September 1.

No date.—The Carlisle Corporation invites British architects to submit designs for the façade to English Street and the Victoria Viaduct, suitable for shops and business premises. The site was previously occupied by the Prison. The total length of the frontage is approximately 358 ft. Assessor : Francis Jones, F.R.I.B.A. Premiums : £300, £200, and £100. Particulars of the competition, etc., may be obtained from Percy Dalton, A.M.INST.C.E., A.R.I.B.A., City Engineer, 18 Fisher Street, Carlisle. Deposit, £1 1s.

No date.—The General Syndicate, Ltd., invites architects to submit competitive schemes for the development of a site at Liverpool, fronting St. John's Lane, Queen Square and Rose Street. Premiums : £250, £100 and £50, for first, second and third prizes, respectively. Particulars, etc., are obtainable on application to the Secretary, the General Building Syndicate, Ltd., 36 St. Martin's Lane, W.C.2.

THE ARCHITECTS' DIARY

WEDNESDAY, JUNE 18

R.I.B.A., 9 Conduit Street, W.1. British Architects' Conference, to be held at Norwich. Until June 21 inclusive. The headquarters of the Conference will be at the Stuart Hall, where an informal reception will be held during the hours 8 p.m. to 11 p.m. **8 p.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. International Exhibition of Modern Commercial Architecture. Until June 30.

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition open to the public. Open until September. **10 a.m.**

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. At Torquay. South-Western District Meeting.

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art, held in the North Court. 10 a.m. to 6 p.m. (Thursdays, 10 a.m. to 10 p.m.) **10 a.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

THURSDAY, JUNE 19

R.I.B.A. British Architects' Conference. At the Stuart Hall, Norwich. The president will deliver the inaugural address, followed by "Regional Planning, with Special Reference to Norwich and Norfolk," by W. Harding Thompson, F.R.I.B.A., at 10.15 a.m. Lunch, 1 p.m. Assemble at St. Andrew's Hall, where Conference photograph will be taken. 2 p.m. Alternative visits during afternoon. Reception by the Lord and Lady Mayoress, at the Castle Museum, at 8 p.m. **10.15 a.m.**

FRIDAY, JUNE 20

R.I.B.A. British Architects' Conference. At Norwich. Alternative whole-day visits. Conference Banquet at St. Andrew's Hall. 7.15 p.m. for 7.30 p.m. **7.30 p.m.**

LONDON SOCIETY. At the Royal Society of Arts, John Street, Adelphi, W.C.2. "Landscape Road Designs, with Special Reference to Recent Work in the U.S.A." By Thomas Adams, F.S.I., M.T.P.I. The Rt. Hon. Lord Ponsonby will preside. **5 p.m.**

SATURDAY, JUNE 21

Sunrise, 4.42 a.m. Sunset, 9.21 p.m.

R.I.B.A. British Architects' Conference. At Norwich. Informal visits. 9.45 a.m. to 1 p.m. **9.45 a.m.**

ROYAL SANITARY INSTITUTE. Annual Congress to be held at Margate until June 28 inclusive. Various lectures, discussions and visits will be held throughout the week.

ADVERTISING ASSOCIATION. At the Pier Pavilion, Hastings. Opening of the Sixth Annual Advertising Convention. The Rt. Hon. Lord Riddell will preside. 3.30 p.m. The Convention will continue until June 25, inclusive. **3.30 p.m.**

MONDAY, JUNE 23

R.I.B.A., 9 Conduit Street, W.1. Exhibition of models, masonry specimens, drawings and photographs of St. Paul's Cathedral. 10 a.m. to 8 p.m.; (Saturdays, 5 p.m.) Until June 28. **10 a.m.**

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Visit to Westminster Abbey. Meet in the Jerusalem Chamber at 4 p.m., where Dr. Foxley Norris will address those present. **4 p.m.**

TOWN PLANNING INSTITUTE. At the Institution of Mechanical Engineers, Storey's Gate, St. James's Park, S.W.1. General Meeting. "Why Not More Progress with Town Planning?" By Professor Patrick Geddes, M.T.P.I. **6 p.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At Eastbourne. Summer Meeting. Council Meeting at the Grand Hotel, at 5.30 p.m. **5.30 p.m.**

TUESDAY, JUNE 24

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At Eastbourne. Special Meeting of Members at the Grand Hotel, at 10 a.m., followed by "A Review of the Present Position of Automatic Heating by Oil Burning." By I. Lubbock, M.A. (CANTAB.), A.M.I.MECH.E. Motor Drive to Beachy Head, 2.30 p.m. Reception by the President and Mrs. E. R. Jones in the Grand Hotel, 7 p.m. Banquet, 7.30 p.m. **10 a.m.**

WEDNESDAY, JUNE 25

R.I.B.A., 9 Conduit Street, W.1. Special General Meeting. "The Restoration of St. Paul's Cathedral." By Captain C. Stanley Peach, F.R.I.B.A., and W. G. Allen, F.R.I.B.A., and Lantern illustrations. **8 p.m.**

ROYAL SANITARY INSTITUTE. At Margate. Meetings of the Architectural and Engineering Sections. **10 a.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At Eastbourne. Summer Meeting. Assemble at Grand Hotel for Group Photograph, 9.15 a.m. Circular Motor Drive, 10 a.m. **9.15 a.m.**

FRIDAY, JUNE 27

LONDON SOCIETY, Lancaster House, St. James's S.W.1. Visits to Deaf and Dumb Asylum, 179 Clapton Road, Hackney, and St. John's Institute Hackney. Meet at the first-named place at 2.45 p.m. Tea will be provided at St. John's Institute. **2.45 p.m.**

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL SOCIETY, The Castle, Winchester. Excursion to the Joinery Works of Messrs. W. E. Chivers and Sons, Ltd., Devizes, and buildings of architectural interest in the neighbourhood. A General Meeting will be held after lunch.

SATURDAY, JUNE 28

Sunrise, 4.45 a.m. Sunset, 9.21 p.m.

MONDAY, JUNE 30

INSTITUTION OF MECHANICAL ENGINEERS. At the Henry Herbert Wills Physics Laboratory, University of Bristol. Summer Meeting. Until July 4.

TUESDAY, JULY 1

INSTITUTE OF QUARRYING. At the Grand Hotel, Scarborough. Annual Conference. Until July 5.

WEDNESDAY, JULY 2

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION. Annual Exhibition to be held at Portsmouth until July 8.

FRIDAY, JULY 4

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Joint Meeting with the Hampshire and Isle of Wight Architectural Association. Visits to the new Town Hall (description by E. Berry Webber), the Old Bargate (description by H. P. Cart de Lafontaine), Guildhall, Empire Theatre, and Ocean Liners. Particulars are obtainable from the Hon. Secretary.

SATURDAY, JULY 5

Sunrise, 4.49 a.m. Sunset, 9.19 p.m.

R.I.B.A., 9 Conduit Street, W.1. Tour to United States and Canada by the Cunard Liner "Samaria." Returning on July 25. Members wishing to take part in the trip should apply to H. T. Leese, 26-27 Cockspur Street, London, S.W.1.

WORTHING MUNICIPAL BATHS COMPETITION. Latest date for submission of designs.

SUNDAY, JULY 6

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Excursion to Romsey and the New Forest.

WEDNESDAY, JULY 9

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. At Scarborough. Annual Meeting and Conference. Until July 12.

FRIDAY, JULY 11

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Annual River Trip. Visit to the West India Docks. The party will leave Westminster Pier at 2 p.m. Tickets 8s. 6d. (including tea). **2 p.m.**

SATURDAY, JULY 12

Sunrise, 4.56 a.m. Sunset, 9.14 p.m.

WEDNESDAY, JULY 16

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Annual Excursion to Denmark and Sweden, returning to London on July 29. Particulars of the tour, etc., are obtainable from F. R. Yerbury, Secretary, Architectural Association.

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Liége. July 16–17.

FRIDAY, JULY 18

BRITISH STEELWORK ASSOCIATION. At the Institution of Mechanical Engineers, Storey's Gate, S.W.1. "Skyscrapers in America." By G. E. J. Pistor. 5.30 p.m. (Tea will be served at 4.45 p.m.) **5.30 p.m.**

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Antwerp. July 18–19.

SATURDAY, JULY 19

Sunrise, 5.4 a.m. Sunset, 9.8 p.m.

SATURDAY, JULY 26

Sunrise, 5.13 a.m. Sunset, 8.59 p.m.

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Visits to Leeds Castle, Chilham or Bodiam, etc., organized by the Canterbury and Tunbridge Wells Chapters. Particulars of the visits are obtainable from the Hon. Secretaries of the Chapters.

THURSDAY, JULY 31

LUTON TOWN HALL COMPETITION. Latest date for submission of designs.

DUDLEY SCHOOL COMPETITION. Latest date for submission of designs.

LAW REPORT

A FACTORY THAT COLLAPSED

Webster and Weddell v. *Robson and Perrin and another. High Court of Justice. Official Referee's Court. Before Sir Francis Newbolt*

IN this action, which had been referred from the King's Bench Division, Mr. Philip Reginald Webster and Mr. William Weddell, trading as Weddell Brothers, advertising contractors and poster printers, of Sussex Road, Holloway, sued Messrs. Robson and Perrin, surveyors, valuers, etc., of King William Street, E.C., and Mr. George Clare, architect, of College Road, Harrow, for damages for negligence and breach of duty as architects, or for damages for breach of contract.

It appeared that in September, 1926, plaintiffs were minded to purchase a piece of land and erect a factory at Elthorne Road, Holloway. Defendants' firm undertook the duties of architects and instructed the second defendant to assist them, introducing him to the plaintiffs. The selected contractors were the Cellular Construction Co., Ltd., of Chandos House, Westminster, and the contract price for the erection of the building was £4,367. Defendants' firm, it was alleged, said the company was a substantial one, sound financially, and able to carry out the contract in a satisfactory way such as would be passed and approved by the County Council or the District Surveyor. It was further stated that the contractors were the English branch of the Monnoyer Construction Co., but plaintiffs alleged that this was not true. Plaintiffs alleged that in spite of their protests defendants issued certificates for payment amounting to £2,800. On October 22, 1927, the roof and floors of the factory collapsed.

Defendants denied all the allegations.

The Official Referee, after hearing the evidence, in a reserved judgment, said the case had taken nearly two and a half years to come to trial, and it presented several novel features of interest to the building trade, to architects and to those interested in the safety of buildings. During his (Sir Francis') forty years' experience he did not remember anything quite like it. Amongst the many unusual features were, first, that a factory costing thousands of pounds and requiring corresponding skill and labour, to be completely erected in ferro-concrete in London by a limited company which had no money—not even the necessary money for wages—was proceeded with in a dilatory manner, the contract time being largely exceeded, should collapse from inherent weakness; faulty design, bad workmanship and want of supervision, whilst the company rushed into voluntary liquidation without assets. No inquiries had been made by the architects about their financial standing. Secondly, the architects were named and the contract made on the R.I.B.A. model and were now defendants. They were incapable of preparing the plans and calculations for a new and experimental ferro-concrete scheme, which they advised should be used, and so the plans were prepared by a builder or engineer, who with one other man, a Belgian, constituted the Cellular Construction Co. The latter had no knowledge of the L.C.C. regulations and was using a scheme of his own not hitherto tested. Thirdly, the plans and calculations, although contrary to the regulations, were passed by the District Surveyor, who was very properly superseded in consequence. Thus Mr. Henry, who was trading as Robson and Perrin, was employed by the building owners, and signed all the certificates for payment and received all the architects' fees paid. He was not an architect, and claimed that he was not employed as architect at all. The second defendant, Mr. Clare, was an architect, who prepared an abortive plan on another system, which was not used, but he was not, in fact, regarded by the owners, the plaintiffs, as anything more than Mr. Henry's assistant. He admitted he had no skill in concrete work and could not plan specifications and calculations for the building or supervise or check the builder's work, or order mistakes to be rectified. So he relied upon a ferro-concrete expert, thus, in his own estimation, getting rid of his responsibility. This expert was, though it could scarcely be credited, the Belgian builder himself, whose work and material had to be checked and passed. He (the Referee) found that Messrs. Henry and Clare were partners as architects of the building, and were responsible if anything went wrong. He found that the architects were liable in damages. Judgment would be entered for the plaintiffs, with costs, on the question of negligence. Damages would be assessed later.

BRIDGES AND PONTAGE

LEANING over bridges has become, I fear, a lost employment. Instead, we crawl into a car and pass swiftly across them, thankful if the press of traffic has not caused our "wings" to be scraped on the parapets. When a boy, I was driven behind a pony over many of the bridges shown in this book, and the pony was pulled up, left to snatch at grass and flies, and the bridge examined, both in its reflected image in the water and, if possible, in perspective from the banks; and so my first use of Mr. Jervoise's photographs and notes is to give me back my bridges—Harnham, Bull, Amesbury, Milford, Wool and the rest, and to add many another. Each item is treated by the author separately with a character sketch, of which there are nearly four hundred. I know only of four omissions, possibly as being inconspicuous; they are, first, the small Fisherton bridge over a backwater of the Salisbury Avon (it was widened and levelled about 1905, when the arches were removed, but the old parapets refixed on steel girders); secondly, the two over Wylye and Nadder, south of Wilton Park wall, quiet work of eighteenth-century character in idyllic surroundings; and the last has just been destroyed by the appropriate authority, and its worn old parapet replaced by a balustrade so hideous it invites suicide. This bridge crossed a tributary of the Wey at Mayford.

Mr. Jervoise, in his exhaustive examination of old documents, has traced few founders of bridges, probably because nearly every original bridge was a timber construction constantly in need of repair and often of rebuilding. A few examples are mentioned in which timber is still used to span from one stone pier to another. Has he any evidence of the reverse construction, i.e. of timber posts and ribs supporting a stone "causey" and contributing to the solution of vaulting by ribs as the normal mediæval practice?

Two types of bridge appear to be general and show succinctly the two schools of the Middle Ages—the first is that of the military engineer and is a plain fortification against the stream's force; the second is that of the church builder and is lightened with mouldings, and becomes as it were a Christian and native narcissus gazing at what is divine within its own image.

A mediæval bridge needing repair was usually the subject of an "inquisition" by the King's officers. If no liability could be fixed, a grant of pontage, i.e. of exacting toll, was made to certain persons for a period till enough money was raised. The author gives many details of pontage, and his book is essential to the student of social life as well as art. It is extremely well arranged and the photographs are charming.

P. M. STRATTON

The Ancient Bridges of the South of England. E. Jervoise, A.M.I.C.E. For the Society for the Protection of Ancient Buildings. London: The Architectural Press. Price 5s. 6d. net.

TRADE NOTES

Messrs. Storry, Witty & Co., Ltd., have issued two circulars concerning the importation of putty from the Continent. In one of the circulars the firm state: "Linseed oil putty is made from whiting and linseed oil without any admixture of other oils. British-made putty, when marked 'Linseed Oil Putty,' is made from linseed oil and whiting only. A great deal of putty made on the Continent is imported into this country marked 'Linseed Oil Putty.' The bulk of it is made from mineral oil with a small percentage of linseed oil. Owing to this Continental putty being marked 'Linseed Oil,' many buyers think they are getting genuine putty at a low price. Putty made by us, whether marked 'Stority' or 'Linseed Oil Putty,' is guaranteed made from pure linseed oil and whiting, and nothing else." In the other circular the firm state: "A few days ago we received an offer from the London agent of a Continental firm quoting 'Genuine Linseed Oil Putty' at a very low price, and offering to send a keg as sample, which we obtained. We submitted it to a public analyst and found that the oil with which it was made analysed 86·25 per cent. of mineral oil and 13·75 per cent. of linseed oil." Copies of the circulars can be obtained from Messrs. Storry, Witty & Co., Wincolmlee Colour Works, Hull.

*

The accompanying illustration shows a new type of construction used for the terracing of the balcony during the reconstruction of the Theatre Royal, Bolton. It is reproduced from "The Modern Super-Cinema," an article by M. B. Buxton, M.A., ASSOC.M.INST.C.E., in *Modern Steelwork*, just published by the British Steelwork Association. This terracing, says the author, instead of being constructed in concrete or timber, is made of ¼-in. continuous steel plates, bent to shape and bolted together to form the steps. The timber flooring and casings are bolted to the upper side of the steel plating, with felting between, to prevent resonance. The whole area of each balcony is therefore covered with ¼-in. steel plating, which, besides effectively distributing the load to the rakers and cantilevers, makes a very strong and rigid flooring, free from spring and deflection. It is, of course, fireproof, and also considerably lighter in weight than concrete terracing. The advantage in this form of construction over concrete is the speed of erection; the steel plating being rapidly fixed and the contractor able to follow on immediately with the wood flooring without any delay.

The book is a review of current practice in the employment of structural steelwork and bridges and is edited by W. R. Gilbert. Among the contributors are J. R. Sharman, Howard Robertson, Alfred C. Bossom, and M. B. Buxton. It is published at the offices of the Association, Artillery House, Westminster, S.W.1. Price 5s. net.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All inquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated, readers should apply to the Patent Office, 25 Southampton Buildings, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

16749. Barr, F. J. Machine for manufacture of reinforced concrete pillars, etc. May 30.

16567. Elektrochemische Werke München Akt.-Ges. Rendering structural materials waterproof. May 29.

16601. Foulds, W. Buildings and structures. May 29.

16140. Fourcade, C. A. Hoques. Wire netting for reinforced concrete slabs and machine for manufacture thereof. May 26.

16922. Helsby, C., and West Rotinoff Piling and Construction Co., Ltd. Reinforced concrete structures. May 31.

SPECIFICATIONS PUBLISHED

313525. Coanda, H. Building element.

329908. Gavin, W. A. J., and Lyne, R. J. Window frames and method of fixing same in building construction.

ABSTRACT PUBLISHED

327766. Ingram, A. Building blocks.

THE BUILDINGS ILLUSTRATED

Following is a list of the specialists, general contractors and some of the sub-contractors for the buildings illustrated in this issue:

Eastbourne College War Memorial Buildings (pages 924, 929–932). General contractors for the recently executed work, Chapman, Lowry and Puttick, Ltd. General contractors for the tower and south block, Walter Lawrence and Son, Ltd. Stone carving, George Alexander. Sub-contractors: Durbin and Sons, central heating; Thos. Elsley, Ltd., rain-water goods; Bainbridge, Reynolds, Ltd., wrought-iron gates, etc.; Jacob, White & Co., Ltd., electric light and power; Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., floors; Smith, Walker, Ltd., constructional steelwork; C. E. Welstead, Ltd., lead light casements; Hollis Bros. & Co., Ltd., wood block floors; S. and E. Collier, Ltd., tiles; Weldon Quarries, stone; Daneshill Brick and Tile Works, Ltd., "Daneshill" sand-faced and hand-made 2⅝ rough texture mixed colour facing bricks, and "Daneshill" moulded bricks.

Headington School for Girls, Oxford (pages 933–936). General contractors: Benfield and Loxley, Ltd. Sub-contractors: Redpath, Brown & Co., Ltd., structural steelwork; Gloucester Brick and Tile Co., facing bricks; E. Mathews & Co., tiling contractors; Constone, Ltd., reconstructed stone, precast concrete beams, composition and terrazzo flooring, and stairs; Hollis Bros., Ltd., wood block flooring; J. H. Pye, steel windows; Engert and Rolfe, Ltd., asphalt flats; Ewart and Sons, Ltd., copper to turret and lightning conductors; the Merchant Trading Co., Ltd., "Celotex" ceilings throughout; Hill, Upton & Co., electric lighting installation; F. G. Alden, heating and hot-water installations; Mowbray & Co., Ltd., panelling and book shelving to library; H. Hunt and Sons, gymnasium equipment; J. Gibbons, Ltd., cloak-room fittings; the Bennet Furnishing Co., Ltd., laboratory fittings; F. De Jong & Co., Ltd., fibrous plaster decorations; Eagleston & Co., Ltd., sanitary fittings and fireplaces; Adamsez, Ltd., sanitary fittings; Parker, Winder and Achurch, Ltd., door furniture and miscellaneous hardware; J. H. Grant and Sons, Ltd., wrought-iron gates and ventilating trunks; Pilkington Bros., Ltd., "Vita" glass to windows of classrooms.

Sports Pavilion, Kirriemuir Hill (pages 946–947). A. Adamson and Son, mason work; A. W. Bonar, joiner work; James Clark, plumber work; James Kerr and Son, slater work; John Doig, plaster work; James Stewart, painter work; Negretti and Zambra, camera obscura; McDonald and Creswick, Ltd., geographical indicator and wrought-iron stair rail; Pilkington Bros., Ltd., "Georgian" wired glass in windows.



The ingenious construction used for the terracing of the balcony at the Theatre Royal, Bolton.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	•1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	•1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor ..	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood ..	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_1	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester ..	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster	Yorkshire	1 7	1 2½
B	Dorchester	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	•1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_2	Gillingham	S. Counties	1 4½	1 0½
A_2	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_1	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	•1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	•1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	•1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	•1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	•1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2

• In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Fireбricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			

Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., Per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:			
Whilbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			

HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33½ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6

RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies			£14 0 0
Countess			23 0 0
Duchess			32 10 0
Old Delabole	*Med. Grey*		*Med. Green*
24 in. × 12 in.	£42 11 3		£45 1 0
20 in. × 10 in.	31 4 3		33 0 6
16 in. × 10 in.	20 18 0		22 4 9
14 in. × 8 in.	12 1 0		12 16 3
Green Randoms, per ton			8 3 9
Grey-green do., per ton			7 3 9
Green peggies, 12 in. to 8 in. long, per ton			5 13 9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey		*Med. Green*		
24 in. × 12 in.	£5	0	0	£5	2 0
20 in. × 10 in.	5	5	0	5	10 0
16 in. × 10 in.	4	15	0	5	1 0
14 in. × 8 in.	4	10	0	4	15 0
Green randoms				6	7 0
Grey-green do.				5	9 0
Green peggies, 12 in. to 8 in. long				4	13 6

TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6
Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.			
FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):

7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak. per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0

FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33½ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1½ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1½ in. thick, per yd. sup.	0	12	0
Maple 1½ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¾ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1⅜ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1½ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1s. 8½d. *per hour*; MATE, *do.* 1s. 3½d. *per hour*; ERECTOR, 1s. 8½d. *per hour*; FITTER, 1s. 8½d. *per hour*; LABOURER, 1s. 3½d. *per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1s. 9d. *per hour*; MATE OR LABOURER, 1s. 4d. *per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ⅝ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	0	2	6
DO. ⅝ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ⅝ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in., per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1s. 11½d. *per hour*; LABOURER, 1s. 3½d. *per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ⅛ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1s. 7½d. *per hour.*

Glass: 4ths in crates			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ⅛ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* „	0	2	3
DO. *6 ft. sup.* „	0	2	6
DO. *20 ft. sup.* „	0	3	1
DO. *45 ft. sup.* „	0	3	3
DO. *65 ft. sup.* „	0	3	5
DO. *100 ft. sup.* „	0	3	10
Rough plate, ¼ in., per ft.	0	0	6½
DO. *½ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1

Small sizes slightly less (under 3 ft. sup.).

Patent glazing in rough plate, normal span 1s. 6d. to 2s. per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up | £0 | 3 | 0

Glazing only, polished plate, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

PAINTER, 1s. 7½d. *per hour*; LABOURER, 1s. 3½d. *per hour*; FRENCH POLISHER, 1s. 8½d. *per hour*; PAPERHANGER, 1s. 7½d. *per hour.*

Genuine white lead, per cwt.	£3	0	9
Linseed oil, raw, per gall.	0	4	6
DO., *boiled, per gall.*	0	4	9
Turpentine, per gall.	0	4	7
Patent driers, per cwt.	1	10	6
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	2	2	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	6
DO., *flat, per gall.*	0	15	6
DO., *paper, per gall.*	1	2	6
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

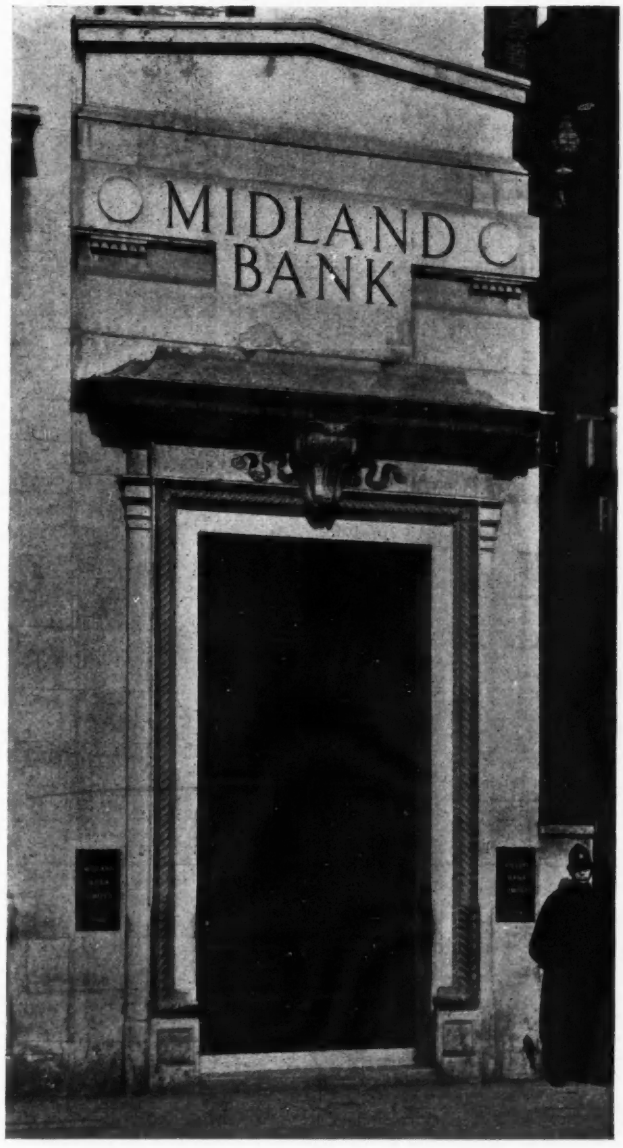
Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. from 3d. to	0	0	6
Plaster-board, per yd. sup. from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. from	0	2	3
Asbestos sheeting, ⅛ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, ⅛ in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ⅝ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	⅛ in.			¼ in.			⅜ in.			½ in.		
Qualities ..	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon												
Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak												
1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak												
1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—

SCALE DETAILS:
A WEEKLY SERIES



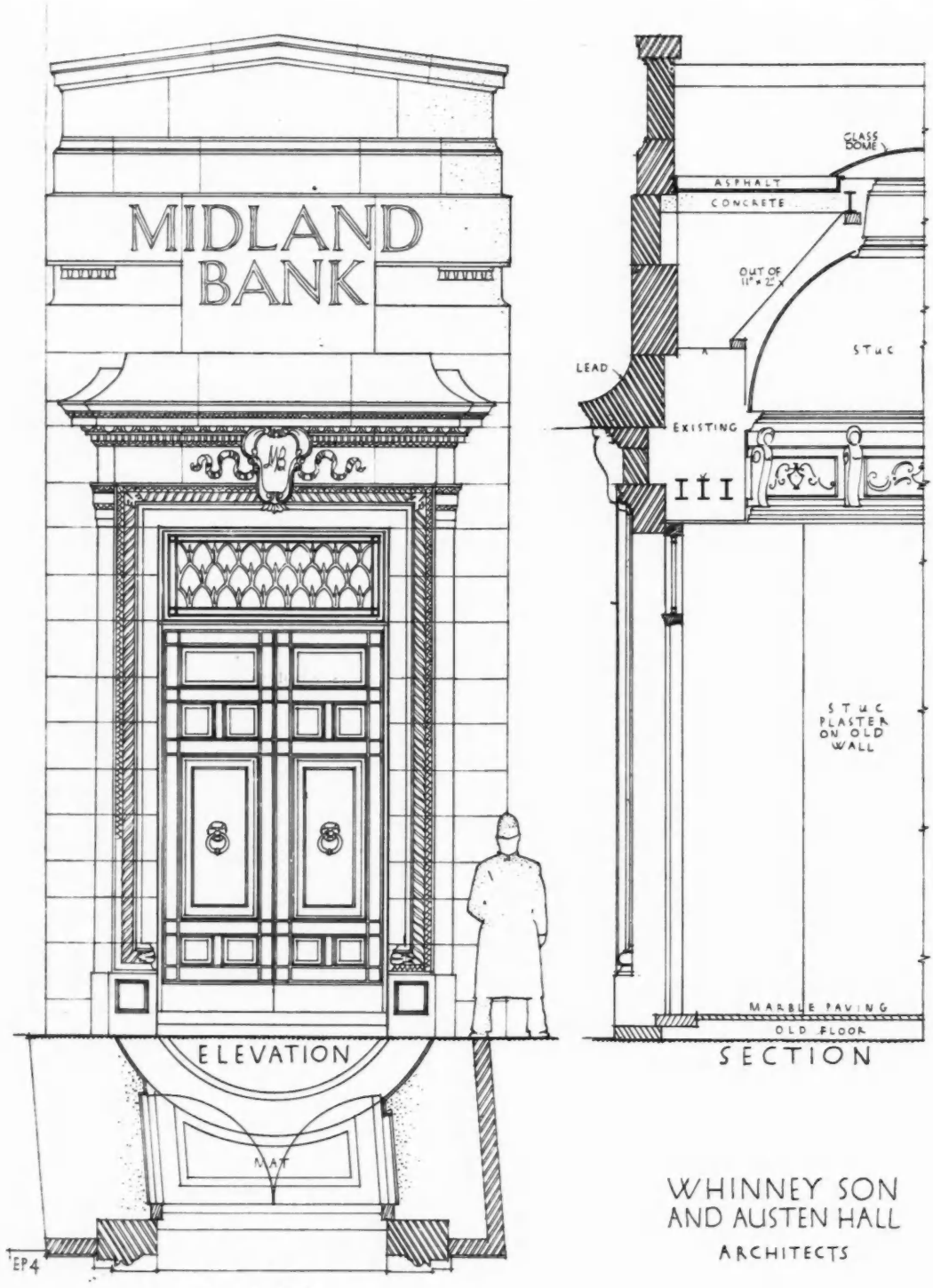
DOORWAY AT THE MIDLAND BRANCH BANK, PECKHAM, S.E.
DESIGNED BY WHINNEY, SON, AND AUSTEN HALL

THE whole of the front of this building is carried out in Portland stone, finished with a sawn face and fine jointing; the carved surround to the doorway itself is surmounted in the traditional manner by a cartouche carrying the initials of the bank (M B), interlaced. The title lettering is incised to a deep V-section and afterwards gilded.

The coffered hardwood doors, which, during banking hours, fold back and form the sides of a small lobby open to the street (it will be noticed on reference to the drawing that for this reason the frames are not rebated in the usual way), give on to a circular-domed vestibule carried out in stuc, with a marble floor and skirting, and lit from the "eye." Difficulties in dealing with a change of axis between these entrance doors and the inner doors to the banking hall have been overcome by the use of this circular cell, which necessarily has no definite axis of its own.

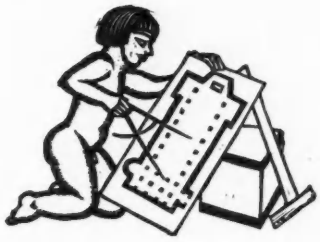
The drawing overleaf may be read with an architect's scale ($\frac{1}{4}$"=1 foot).

MIDLAND BANK
69 HIGH STREET PECKHAM SE
QUARTER SCALE DETAILS of ENTRANCE



WHINNEY SON
AND AUSTEN HALL
ARCHITECTS

THE ARCHITECTS' JOURNAL



WEDNESDAY, JUNE 25, 1930

ART and TECHNOLOGY

"In this country there is one great weakness in our technical education, and that is the severance, sometimes almost hostility, between the art college and the technical college, and this conflict is fought out over the body of Industry."

—Lord Eustace Percy's address to the International Congress of Building.

AT the recent International Congress of Building Works Contractors, Lord Eustace Percy made some interesting observations upon the relationship between art and technology at our educational institutions. He feared there was too often a divorce between these two subjects, with results that are injurious to industry. Moreover, in the British Report on Education and Training, it was suggested that the academic and commercial trend of the secondary school should be corrected by an equal trend towards industrial occupations. In particular, the building industry needed courses of university standard for those who might follow a career in building.

Lord Eustace considers that architectural education suffers from this unnatural division between its æsthetic and practical aspects, and he imagines the architect to be torn between the conflicting claims of the art college and the technical college. In commenting upon this statement, one must draw a sharp distinction between those recruits to the architectural profession who are fortunate enough to be able to attend one or other of the excellent architectural schools which have now been established, and the numerous body of students attached to the various schools of building and polytechnic institutions.

In the architectural schools, as is well known, special provision is made for the teaching of technical subjects such as building construction; and while, of course, it cannot be expected that the students should acquire at this early age a thorough knowledge of the business or practical sides of their profession, they are at least given a good general survey of the art and science of building.

Equally, in the training of builders and contractors, it is now being recognized that academic qualifications are highly desirable, and the Institute of Builders is fully alive to this aspect of the question. The men who are being trained as builders are beginning to recognize the necessity of acquiring a familiarity with the main concepts of architectural design.

It is in the teaching of the "crafts" and in industrial education that the need for reform is most apparent. The "Arts and Crafts" movement we have indeed had with us for many years, but the hundreds of art teachers who are yearly turned out by the technical schools are still for the most part disciples of William Morris. They have a hostility to the machine, as such, and believe that a special virtue resides in almost any object if only it be the product of careful manual labour. In contradistinction to the "Arts and Crafts" attitude is that of the Design and Industries Association, whose members wholeheartedly accept machinery and are prepared to make the best of it.

Although "Fitness for Function" was the slogan first adopted by this body, there are welcome signs that the conception will presently be enlarged and an attempt will be made to establish a criterion which will take into account other salient factors in design. The important thing to observe is that the machine can make nothing of its own volition, and that, strictly speaking, nothing in the world is "machine-made." All the machine can do is to cast objects into shapes determined by the intellect of man, and whatever faults there may be in a manufactured article must be attributed not to the machine, but to the human agency which directed its activities.

The present standard of industrial design is not high, but it is questionable whether it can be much improved by changes in organization, or even by a revised curriculum in the schools or colleges. The trouble is a more deep-seated one than that. Before the teaching of art can be successful, a philosophy of art is requisite; and the formulation of this has not yet been seriously undertaken by those intrusted with the task of imbuing the recruits to industry with a desire to create beautiful things. To achieve this would be to take a definite step nearer the millennium.



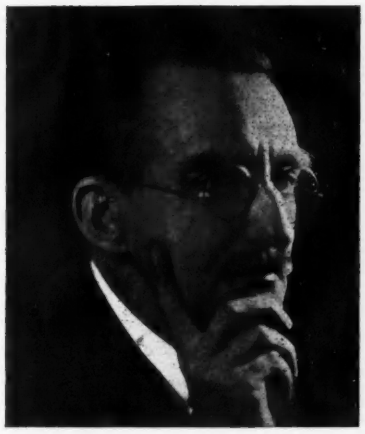
LOFTY TERRACES IN THE METROPOLIS OF TOMORROW:
DRAWN BY HUGH FERRISS

" How are the cities of the future really going to look ? " asks Hugh Ferriss in the foreword of his new book ; and rejoins : " Heaven only knows ! " Nevertheless, brush in hand, he steps forward reasonably and imperceptibly enough, from Part One : Cities of Today, through Part Two : Projected Trends (whence this reproduction is taken), to Part Three : An Imaginary Metropolis, marking the paces with sixty drawings, in which a touch of characteristic fantasy is the unifying principle.

Already the upper levels of zoned apartment houses, sacred but now to elevator machinery, tanks and the janitor, are today being planned by architects as living quarters, and commanding high rents.

A review of The Metropolis of Tomorrow *appears on page 986.*

NEWS & TOPICS



A. Seymour Reeves, contributor of a discussion on the group system to the Specification Writer (page 984). As a member of the R.I.B.A. Practice Standing Committee, he served as chairman of the conference on specifications between that body, the Surveyors' Institution and the Institute of Builders and so, from close dealings, writes with authority on this very important subject.

FAVOURABLE FACTORS AT NORWICH

I THINK I can place my fingers on the two factors that made the British Architects' Conference this year a greater success than any similar conference I have attended. The first is Norwich itself. We have got used to a good architectural setting for these conferences. York, Bath, Newcastle and the rest: they have all provided something memorable in the way of a scene. But Norwich (with all due respect to those other delightful places) gave us something more than a scene. It was the great, pulsating life of the place and its extraordinary personality that captivated us. Agricultural centre, industrial centre, centre of intellectual life—Norwich is all these. The cattle market on the Castle Hill and the flower and vegetable market in front of the Guildhall were superb on Saturday morning. Mr. Colman's many useful and palatable products were exploited by every speaker in turn at the banquet on Friday night. On the intellectual side you have the Maddermarket Theatre and Mr. R. H. Mottram, a happy and popular figure at the banquet. Could anyone imagine a writer of the standing and the age of Mr. Mottram (whom I remember seeing at the Æolian Hall being handed the Hawthornden Prize some years ago by—I think—the late Lord Oxford); could anyone imagine such a person turning his back on London and continuing to reside in any provincial town other than this one? Surely not.

*

I have said enough about Norwich, whose attractions have been very fully discussed in these pages already. The other reason for the success of the conference lay in the fact that the excursion programme contained one item that bore no relation to business, but was, in fact, pleasure pure and undiluted. Now this was a rare and notable thing. I remember no other conference making such a concession to professional frailty—a concession which should, and now no doubt will, again be made. Indeed, the psychology of these conferences is a very subtle matter. English architects are perhaps more efficiently organized than architects in any other country. Their organizations hold frequent meetings, and their Press is generally acknowledged to be without a rival. An elaborate business conference would, therefore, be pointless. A conference devoted to merry-making alone would make a poor story for impatient clients and a harassed office staff. But I am skating on thin ice, and will merely add that as many visitors to the conference joined tour No. 3 to knock about the Broads as the three other tours secured between them, and that the same jolly affair was the only one to be noticed in the local Press, where it filled half a column.

THE CONFERENCE BANQUET

Except that something at the banquet seemed too long, it, too, was universally enjoyed. I say "something," because I really did not notice whether it was the food or the speeches. I only know that I looked at my watch when the first of the three toasts ("The City of Norwich") had been proposed, responded to and so got over. The time was 10.30. Now, no one likes being hustled, but by 10.30 a little more ought surely to have been accomplished. Yes, three hours to finish with the first toast is definitely too much. It may, as I say, have been the food. The food was good enough, but why is it that the number of courses at these dinners is always inversely proportioned to the service accommodation that is available? On Friday last we dined in the nave of a Dominican priory; goodness knows how the food was kept decently warm. And there were nine courses, not counting the dessert. Would anyone have grumbled at five or six? Well, most of the people around me were constantly skipping something, and I know they must have felt as I did.

*

Oh, yes: the speeches. Mr. Kitson made a really magnificent opening. I have seldom listened to so good a speech. Scholarly and yet light, skilfully alternating the serious with the witty, it benefited still further from a most attractive delivery. And the Sheriff of Norwich was extremely funny. Everybody enjoyed his sly references to the Town Hall competition. "In looking round this gathering," he confessed, "I have been trying to guess which head contains the plans which will ultimately be accepted for the erection of that noble structure." And when he complained that, not being a phrenologist, he could not locate the Town Hall Bump, there was a good deal of healthy laughter, hardly lessened, I should think, by the fact that the fascinating speaker's own bumps were not concealed by so much as a single hair.

R.I.B.A. LONDON ARCHITECTURE MEDAL FOR 1929

The present award of the R.I.B.A. Bronze Medal for the best example of London street architecture, completed within the preceding three years, should prove an exceptionally popular one, for the Underground building, the head offices of the London Electric Railway, so modestly described as No. 55 Broadway, is the rare type of building which commends itself alike to "Traditionalists" and "Modernists." Messrs. Adams, Holden and Pearson indeed occupy a unique position in the ranks of architects, for their work, while unmistakably English, seems altogether to have escaped certain native influences of which we have no reason to be proud. The "country bumpkin" classic, so often practised in this country after the late Norman Shaw had set the fashion in this particular style, seems not to have appealed in the least degree to Messrs. Adams, Holden and Pearson, whose designs have always had a distinctively urban quality. I suppose it may be assumed that the medal is for the Underground building itself, judged as an architectural composition, and does not necessarily reflect official opinion about the much-disputed sculpture which is associated with it. One of the principal

virtues of the building is that it is of such distinguished design as to give pleasure alike to those who approve and disapprove of Mr. Epstein's "Night" and "Morning." The award carries a commemorative tablet to be affixed to the building; last year it was applied to the Royal Horticultural Hall, designed by Easton and Robertson.

WATERLOO BRIDGE

Time passes so quickly that it is only with an effort that one realizes for how long Waterloo Bridge has been in splints. Last week I passed under its arches on a river steamer and thought then how black and Piranesi-like the timber-work had become. Now we hear that the L.C.C. must decide whether the bridge is to be reconstructed without delay, or whether the temporary work is to be renewed at considerable cost while Charing Cross Bridge goes through its last agonies. The fate of Waterloo Bridge was linked with that of Charing Cross, though, unlike the latter, it still survives the storm of words and paper—and needs attention. "Something," as we keep on saying, "must be done." "The needs of traffic must be served"—though I have yet to see how the traffic of these bridges is related to that of London as a whole, merely by making them carry more vehicles into the Strand. The truth is that neither offers a good solution of the problem, since every wider road carries more traffic.

LANDSCAPE ARCHITECTURE

In view of the recent formation of an Institute of Landscape Architects in this country, I was interested to read the prospectus of the Harvard University School of Landscape Architecture. America is at a stage of its development comparable, perhaps, with the great period of landscape gardening in this country which left us with our wonderful heritage of park land. We have hesitated over here to take the present revival of interest in the subject at its face value, partly because there seems hardly enough work or money to justify it, and also because we have lost faith in the principles which still animate Americans. They, with work in abundance and everything to do, can afford to make a specialized profession of it and enrol young men in its service.

★

And Mr. Thomas Adam's lecture to the London Society last Friday served to prove how closely linked with the spirit of our own tradition is the work of modern American landscape architects. His subject was "Landscape Road Design," illustrated by particular reference to the Westchester parkway system, and he cheered his audience by telling them that the parkway was born in this country. It was the product of an intelligent landed nobility, and gentry whose descendants we are now in process of robbing of their last resources, while we split up their estates and develop them for speculative building. This is the reverse of the medal. This is how we are losing all they gave us.

★

It does not really matter that they laid out their parks in pride and ostentation, for the public shared, and does still share, the beauties they created, and when we lay out an arterial road today, allowing miserable little villas to line its whole width, we may wonder whether we are not in dire need of a school of landscape architects capable of educating us to the true economy of the parkway—and its beauties. It is, indeed, pathetic to think that, having spent millions upon arterial roads, we have to confess our utter failure as road designers by forming a society that goes round begging money to make them beautiful. The Ministry of Transport has failed utterly in this matter of roads, and looks very like a complacent ass, when compared with the energy with which Americans have gone all out to make roads safe for traffic and beautiful into the bargain.

THE GAY BUNGALOWS

The thin Welsh slates in the Home Counties are, in proportion to home-made tiles, growing beautifully less; especially do the bungalows ban them. The attack on "bungaloid growths" is being outflanked. Our bright young things, who mostly inhabit the one-story type, are evolving a pattern which has its good points. Not young myself, nor ever very bright, any appreciation I can convey is truly disinterested! The choice of local materials, for instance, and of gay colours is to the good; so are the evidences of a sensible work-saving plan, shown by the square shape, and the reduction of out-buildings and oriels to a minimum. The consequent unbroken pyramid of roof on a square base with recessed door gives a character which may appeal to a future house-hunter: "Robin's Roost—attractive, labour-saving bungalow, Bright Young Thing period."

★

It must be recognized soon that bungalows are one thing, and ribbon development another; the latter an unmitigated evil. But the bright young bungalows can charm us in the segregation of their own villages.

SEASIDE PRIDE

Sir Charles Nicholson has been saying hard things of Southend, and I have no doubt that Southend deserved them. Nobody exceeds in complacency the average councillor of a seaside town that prides itself upon being up to date, and one better than its neighbour. Yet of what are such people proud, when one has ruled out as subjects for pride such natural features as not even a town council can in cold blood subdue? Bandstands, piers, sunk gardens, concrete promenade, etc.? I know of so few of these that are even in passably good taste (a notable exception, however, will, I am told, decorate this issue) that one may class them, as a body, bad. How else indeed can they be when councils are so easily satisfied?

★

The people of Southend should realize that when Sir Charles Nicholson calls their sunken gardens "mud holes," the chances of his being right are all in his favour, and that he is presenting them with a professional opinion for which no charge is made. Also, were the opinions of half a dozen really eminent architects called for, they would most likely endorse the criticism.

★

I suggest that the fires of indignation might be banked while a deputation visits the best sunken gardens in England, for I am sure that Southend's anger would evaporate so soon as it saw how much better a garden it might have had, did it but know how good such things could be.

THE ART OF PEN AND PENCIL

Of all the graphic arts, that of the pen or pencil drawing probably makes the most universal appeal. As for the architect, in particular, he stands to it in the relations both of consumer and of producer. Without his avidity in production such a thing as the Sketch Club could never have come into existence. His character of consumer he

involuntarily assumes from all sorts of causes. He may go, as I did, to the new *Punch* offices in Bouverie Street, where are to be seen during the next few weeks some of the finest examples of the craft by four acknowledged masters of black-and-white—John Leech, Charles Keene, Sir John Tenniel and George du Maurier—and straightway fall into a brown study. However remote the foibles and fashions of the forties and fifties of the last century appear to us today, these bewhiskered "dudes" and impossibly Junoesque females conversing so languidly in Victorian drawing-rooms are no less illuminating than their modern prototypes, regarded as foot-notes to that larger history of English manners and politics so faithfully recorded, and with such urbanity, in the pages of *Punch*.

★

Descendants of that "gentle public" to which the first number was addressed will, in fact, see in this exhibition a wider significance than that possessed by the drawings themselves, witty or apt to the moment's folly or tragedy though they are. It provides, indeed, a commentary on virtually the whole of the Victorian era which neither the sociological nor the historical sensibilities of the architect can afford to miss. It is a nation's jokes, rather than its laws, which afford the true index of character, and the wholesome fun which has made Mr. Punch a national institution should be vastly flattering to our insular pride. Incidentally, his excursions into jocular prophecy have been justified by after-events with an almost uncanny precision. Thus, in 1876, we find him picturing the mechanical quarry supplied by "The Pneumatic Despatch Fox-Hunting Co., Ltd.," while two years later he is foreshadowing beam wireless, broadcasting, gramophones, and, in one prodigious flight of fancy, even television.

THE REVOLT AGAINST THE MACHINE

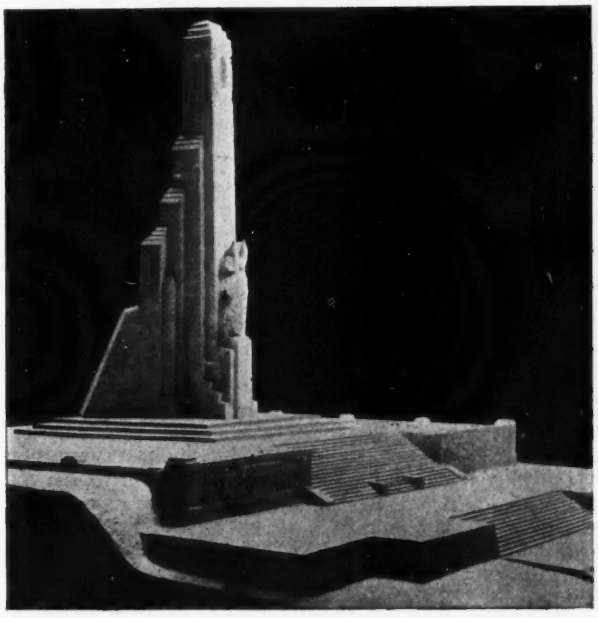
Signs are increasing that man is chafing under the shackles of the mechanical age into which he has inducted himself. I take three instances at random from recent news. Here is the Dean of Manchester laying the "wanness, the signs of nervous tension, the smallness of the stature" of her citizens to the charge of the mechanical unfitness of the city for the requirements of modern business. Then William B. Favile, sometime president of the American Institute of Architects, now on a visit to London, says he thinks the traffic problem will put skyscrapers out of business. "The New York authorities are already baffled by the problem of transporting the thousands of people who work in those 60- or 70-story buildings. There's not room for one motor-car in Wall Street when the offices are closing."

★

But it has fallen to so august a body as the United States Senate signally to hoist the red standard of revolt. Not long ago telephones of the new dial type were installed throughout the Capitol. As the result of their experience of its inconvenience, and of resentment against the labour entailed in manipulating it, they have said, in effect: "Take the —— thing away!" And away it is to be taken—within thirty days. President Hoover himself had led the way, in regard to his own office, some little time previously. When Senators lead the way, shall the mere commoner be dumb when the yoke chafes him? He will be very vocal, I doubt not. But can he break the machine? I have my misgivings.

FRENCH WAR MEMORIAL DESIGN REJECTED

It must be accounted a considerable merit when a Ministry of Fine Arts declines to make any award in an architectural competition for a war memorial commemorating the battle of the Marne. I don't know whether they acted from die-hard motives, or whether, after reviewing tons and tons of sculpture signifying this and that abstraction in terms of planed masonry, they could support the boredom no longer. The memorial they rejected is reproduced here for all to see, and it may become the headstone of the corner for all I know, but at this moment I am at one with Messieurs les Ministres. It has been estimated by someone with nothing better to do that the Great War has been commemorated in France by 60,000 tons of pious but imperishable balderdash.



The Marne Victory Memorial, banned by the French Ministry of Fine Arts.

NO HIGHER BUILDINGS FOR LONDON!

It is a good thing for us that public opinion and the daily press are at one in rejecting the possibility of higher buildings for London, for otherwise we should be delivered into the greedy hands of the business community and left in the shadow of vast sightless masses of skyscraping architecture. Goodness knows, the 80-foot limit made a general rule is quite high enough to rob us of the gracious London that foreigners come miles to see, without making it a second-rate imitation of New York. I do not fancy that the L.C.C. will relax the regulations in favour of a great hotel for the Canadian Pacific Railway, and it is to be hoped that, with its fine record of good building, it will see its way to fit into the picture of the town, instead of forcing the skyscraper issue where it is not desired.

ASTRAGAL

THE SKETCH CLUB

Entries for the first of the Holiday Sketches Competitions have already begun to reach the Editor of THE ARCHITECTS' JOURNAL. *The competition closes on July 15, and the result will be published in our issue for August 6. For conditions see advertisement pages.*





The three views reproduced across the tops of these two pages show the bandstand and the west and east pavilions that flank it, approximately in their relative

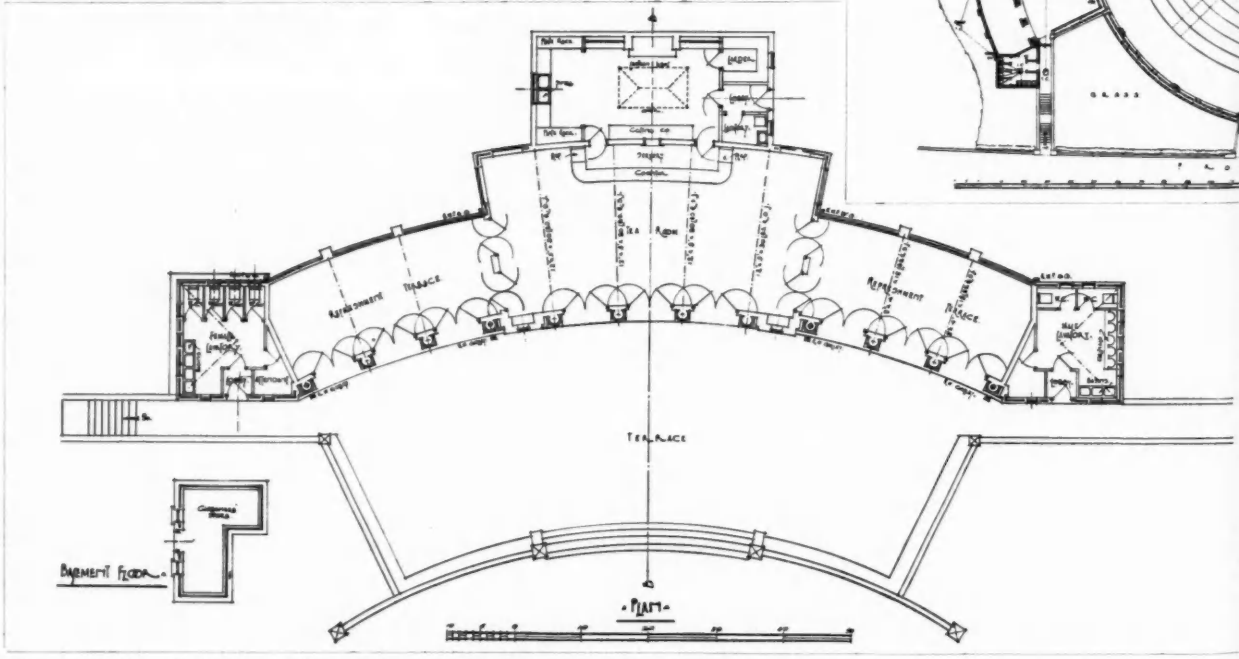
BANDSTAND, PAVILIONS, ETC.

DESIGNED BY BASIL C.

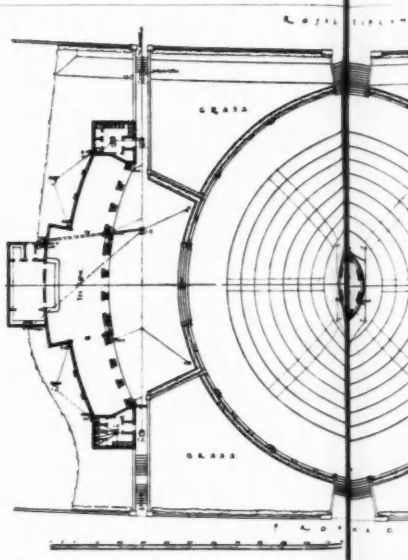
THE new buildings which have been erected on the Ramsgate estate, known as St. Lawrence Cliffs, are the result of a competition held some years ago by the Corporation.

The estate, comprising some ninety acres, with a sea frontage of about three-quarters of a mile, was originally in the hands of private owners, and completely held up the natural development of Ramsgate in a westerly direction, until it was acquired by the municipality. The competition conditions called for a complete layout for the whole of this area, to include suitable amenities and the customary features of a modern seaside resort.

The general scheme (see page 967) consists of a fine boulevard road, 100 ft. wide, traversing the whole length at a distance of about 200 ft. from the edge of the cliffs, with intermediate roads running back at intervals to the main Ramsgate-Canterbury Road and providing extensive building frontages for good-class residential property. The whole of the 200-ft. strip of land in front of the boulevard road is reserved by the Corporation for up-to-date seaside

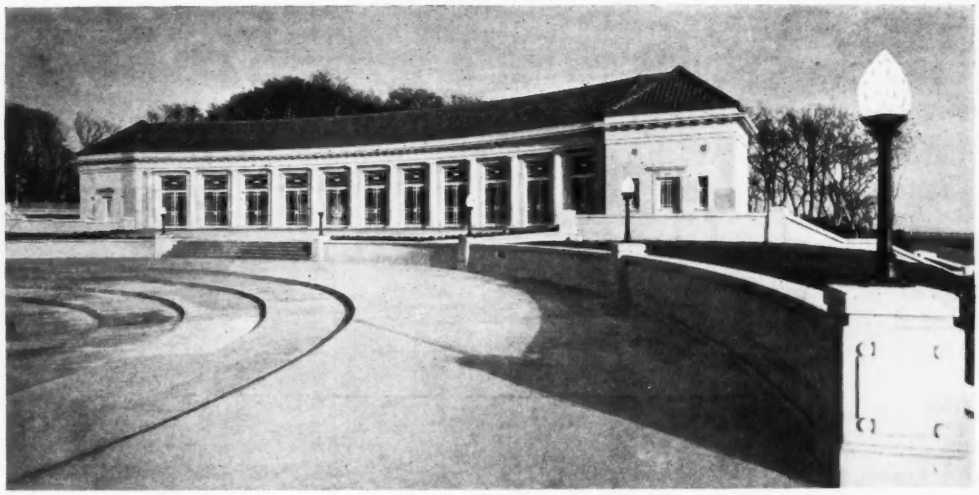


The ground floor of the west pavilion, with small basement plan. Here provision is made for the service of tea to visitors, and included under the same roof are two sets of lavatories.



The ground plan of the bandstand at the





positions, as seen from the south or cliff side, looking inland. The circular terracing is designed to accommodate 2,000 persons, seated in deck chairs.

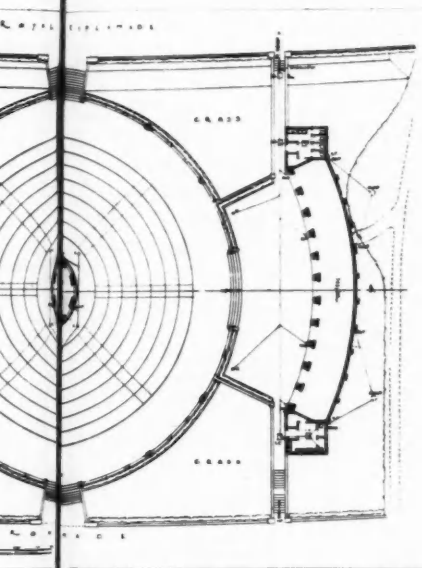
ETC. LAWRENCE CLIFFS, RAMSGATE

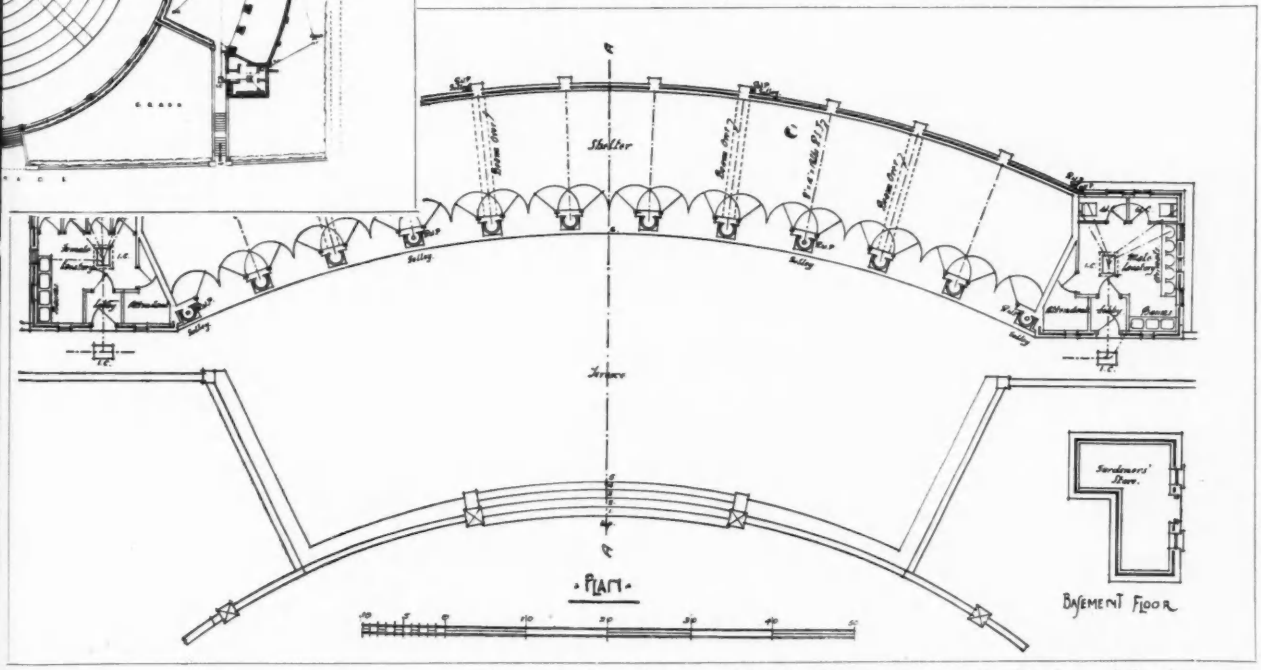
GNED BASIL C. DEACON

pleasure grounds, and has been laid out with a bandstand and pavilions as its centre, and with tennis courts, bowling green, miniature golf course, putting greens and children's playground, distributed along the remainder of the front, each sports ground being equipped with suitable pavilions and glazed shelters, arranged at frequent intervals throughout the estate.

At the eastern end a large electric lift (see overleaf) gives access to a fine undercliff drive, which runs the whole length of the estate, rising at the western end through a picturesque rock chine cut through the face of the cliffs. The bandstand is surrounded by circular-stepped terracing, capable of seating some 2,000 persons in deck chairs. On one side is a spacious tea pavilion, with lavatories, and, on the other side, a balancing shelter pavilion, which will be used for dancing.

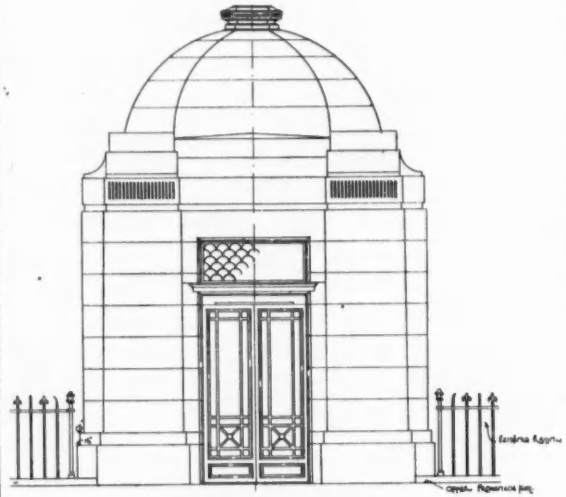
The whole of the fronts of these pavilions are fitted with steel casements, which fold out of sight behind the columns and piers, while the main cornices are equipped with intensive floodlighting, covering the whole area of the stepped terracing.



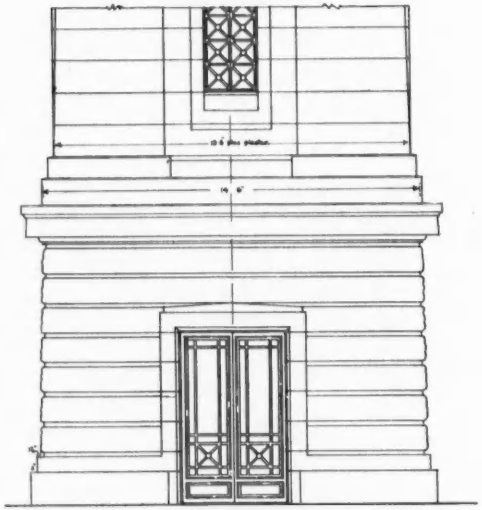


at the centre of the circular terraces.

The east pavilion, in plan. This building has been designed to be used for the purpose of dancing. Like its fellow, it is glazed with steel casements that fold back out of sight.



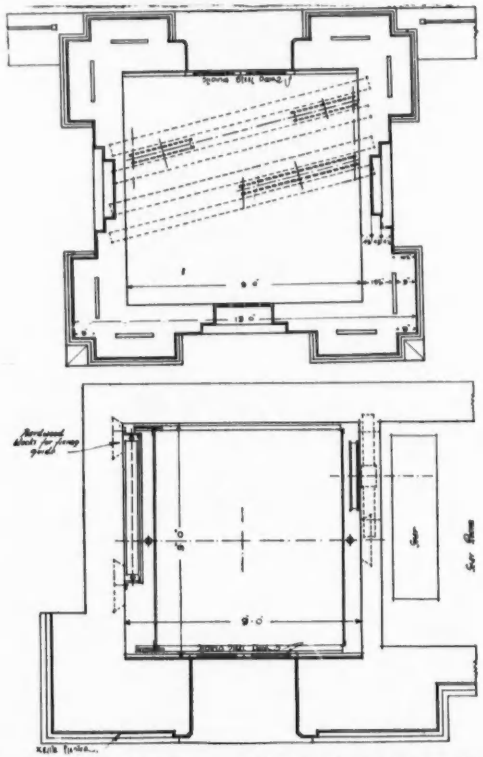
ELEVATION ABOVE PROMENADE

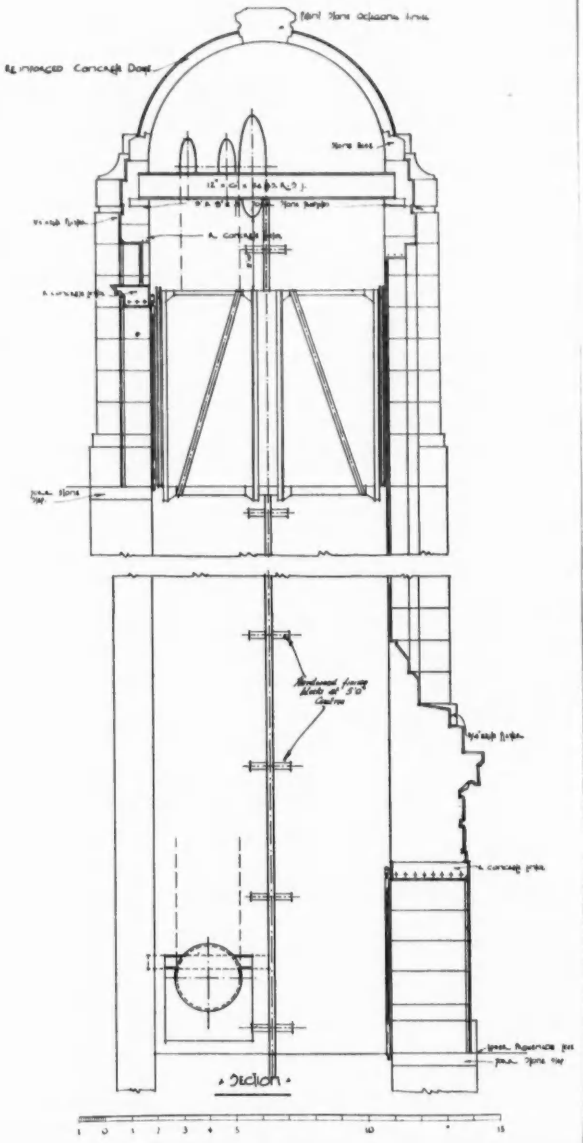


ELEVATION TO LOWER PROMENADE

The architect's detail drawings of the essential portions and plans, at upper and lower promenade levels, together with a photograph, of the electric lift tower, running up the face of the cliffs, at the eastern end of the site, from the Undercliff Drive to the Upper Promenade. The long vertical channel in the face of the tower is embellished with metal grilles—a feature designed in keeping with the rest of the buildings in the scheme here illustrated.



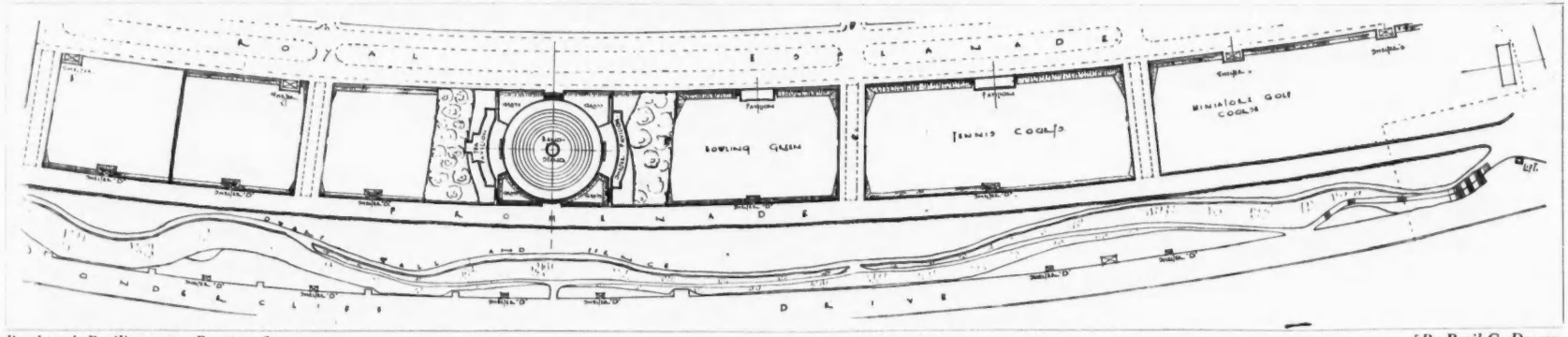




SECTION

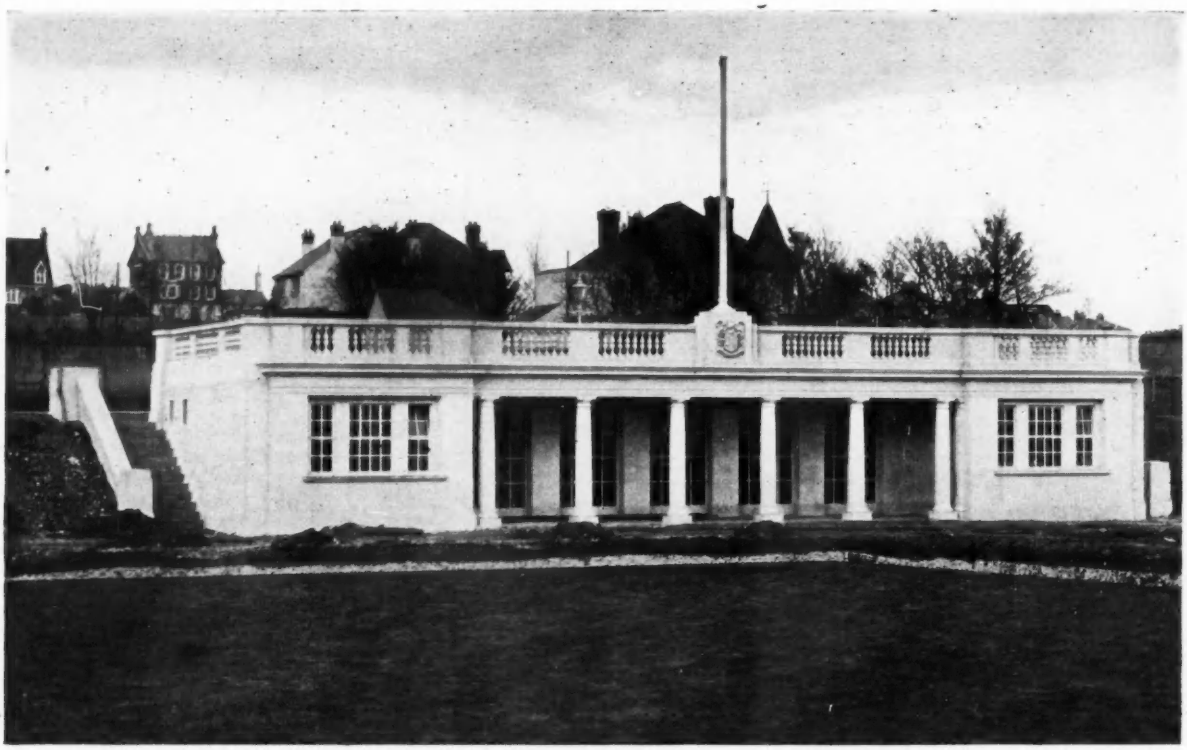


A general view of the band terrace, looking seawards from the north-east. On the right is Royal Esplanade, the broad boulevard road separating the cliff estate from ground suitable for the erection of good-class residential houses, to be served by subsidiary roads; on the left is seen a corner of the east pavilion. Facing it, across the arena, is the tea pavilion.

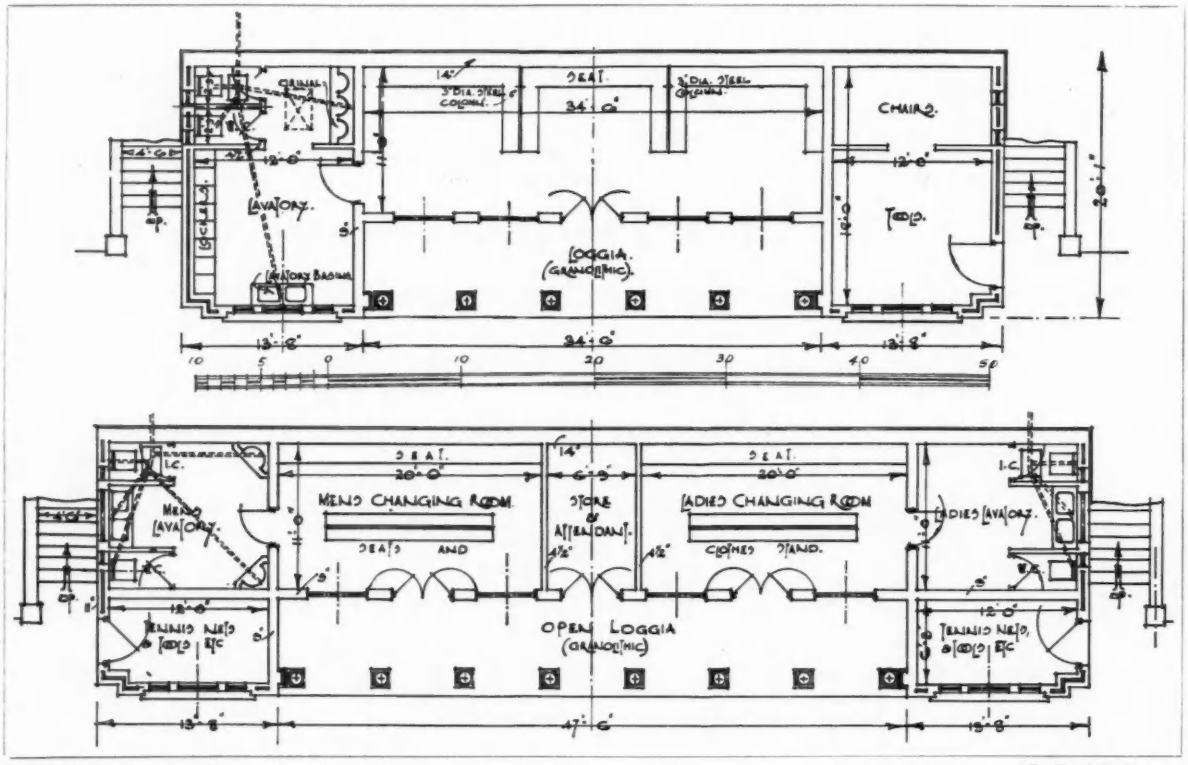


Bandstand, Pavilions, etc., Ramsgate.] [*By Basil C. Deacon.*

This small-scale sketch-plan of the bulk of the cliff estate is included to indicate the location and the relation, one to another, of the various buildings illustrated. A number of small shelters are also provided; and the site of the lift is seen on the extreme right. The idea underlying the scheme, which was chosen in competition, is described in the accompanying article.



The pavilion facing the bowling green. Facing the adjoining tennis courts is another, similar in design, but rather longer, and with eight, instead of six, pillars to the loggia. Both supply substantial changing and lavatory accommodation for the use of players.



Bandstand, Pavilions, etc., Ramsgate.] [*By Basil C. Deacon.*

These ground plans of the two pavilions referred to above, for the bowling green (above) and tennis courts (below), illustrate their similarity in character, but comparison will show some interesting variations (ladies presumably do not yet play bowls). Both are built on ground that slopes sharply, and are lit from the front.

THE RESTORATION OF ST. PAUL'S

IN view of the reopening of St. Paul's Cathedral today (June 25), when the King and Queen are expected to be present, an exhibition of models, masonry specimens, drawings and photographs, illustrating the work of restoration, is now on view at the R.I.B.A. Galleries. The operations have extended over seventeen years, and were passed under review in a lecture, prepared by Captain C. Stanley Peach and Mr. W. Godfrey Allen, FF.R.I.B.A., and delivered at a general meeting in the Galleries on Monday.

In its course the authors, who made use of the various exhibits to amplify their observations, presented an account from which the following points are summarised :—

Most of the defects which have been met with arose from two principal causes :—

(1) The settlements due to the foundations.

(2) The unsatisfactory materials and methods employed in construction, both of which led to consolidation of the building.

Had Wren carried his foundations through to the London clay much trouble would have been saved. There would have been little or no subsidence due to compression of soil, and the stability of the building would not have been a prey to the numerous underground operations which have taken place in its vicinity. First, the heavy masses which comprise the main piers, bastions and west towers settled in relation to the lighter walls surrounding them; later, as the weight of the dome piled up, further settlement took place between the piers and bastions. These settlements were, however, irregular, and comparative levels show them to have been greatest at the S.W. quarter of the dome.

The slight irregularities of settlement were probably due to the uneven temper of the soil and the partial compression of it by the old Cathedral. Some obscurity exists respecting the relation of the axes and the buildings to one another, but there are very few places in which the new foundations can have been entirely clear of the old, and apparently there is only one of the eight piers which stands on the virgin ground.

Another factor leading to consolidation is the use of uncoursed rubble as an infilling to the walls, and especially to the piers. In the crypt, where the piers are widened and project on each side beyond the faces of the piers above, the weight is entirely carried by the rubble. There is evidence in the building that compressions occurred and that the casing fractured in many cases. The results of the consolidation produced dislocation in many of the vaults, arches and walls, but this does not appear to have surprised or alarmed either Wren or the builder. While Mr. Penrose was surveyor trouble arose from corrosion of the iron cramps extensively used as a metal bond, and extensive repairs were carried out by Penrose. The work he did in removing these cramps was a valuable contribution to the preservation of the Cathedral.

In 1897 Mr. Somers Clarke had to face a yet more serious situation, which marks the beginning of the late restoration of the dome structure. He repaired the stone gallery and made it waterproof, and largely reconstructed the upper part of the colonnade, a work which took twenty years to complete. During this period building operations carried out in the vicinity of the Cathedral and requiring deep excavation and pumping, with consequent disturbance of subsoil, had caused slight movements in the structure, to which changes of temperature no doubt contributed. Also, the corrosion of the iron cramps was extending, causing first of all superficial disfigurement and then deeper damage, and as stone after stone fractured the ashlar casing to the piers became weaker and less effective in withstanding the pressure from the rubble core. Between all these causes there was continuous action and reaction which gave rise to defects of the building which Mr. Mervyn Macartney, who succeeded Mr. Somers Clarke in 1906, had to contend with. After consultation, it was decided to restore the two piers in the south transept, which disclosed the defective condition of the masonry and emphasized the grave views already held by Sir Francis Fox which became common knowledge in 1921.

This led to the formation of a Joint Committee of Architects and Engineers consisting of Sir Aston Webb and Mr. Mervyn Macartney as architects, and Sir Basil Mott, Sir George Humphreys and Mr. Trench as engineers. This Commission inaugurated long and thorough examination of the dome structures and recommended the preservation now completed. A thorough survey of the building was commenced, and many experiments and useful research carried out. The Commission advised the closing of the dome area to facilitate the preservation work, and a Works Commission was appointed to carry out the work.

The restoration work can be classified as follows :—

(1) Engineering and architectural surveys and research.

(2) Work to the structure, including grouting and reinforced metal work, and the repairs to masonry and structural work incidental thereto.

The engineering survey consisted of the preparation of volumes of figures, levels and diagrams of measurements taken with the greatest care with the finest and most perfect instruments, giving measurements to one-thousandth of an inch. At any future time movement of the building can be detected, and its direction and extent ascertained and compared with established records.

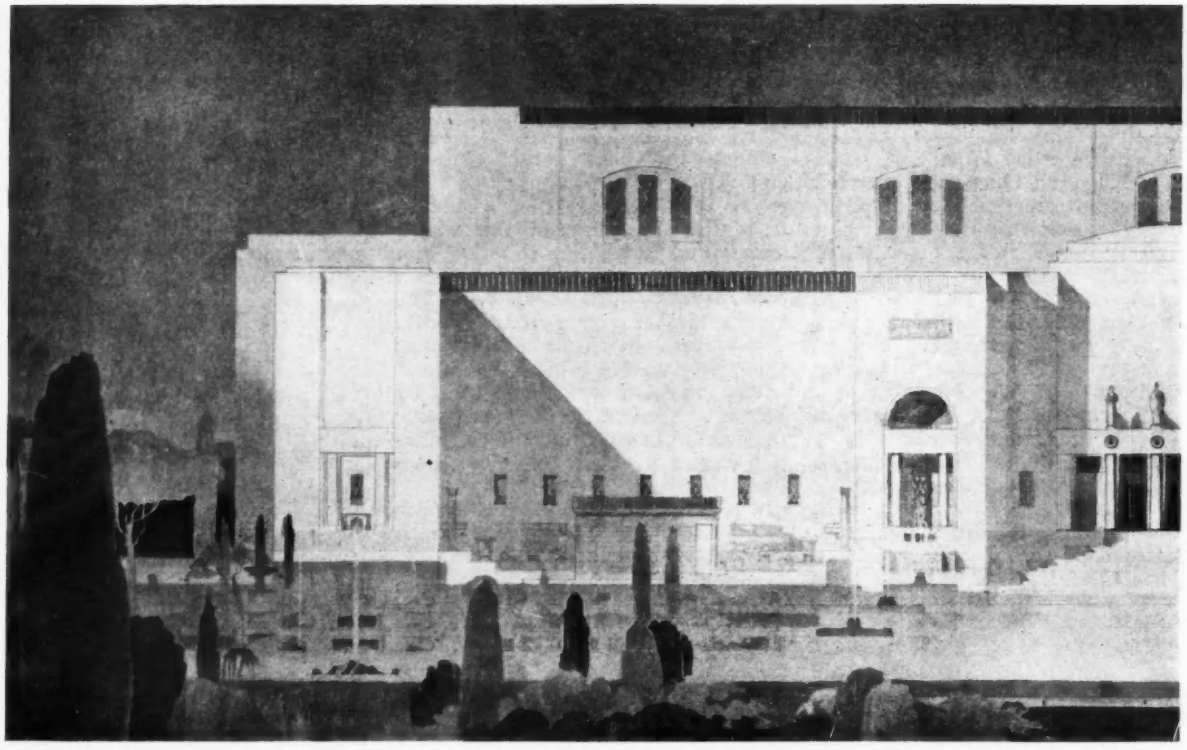
The architectural survey consists of a series of complete and accurate plans, sections, and isometric studies as well as the consideration of many scale models made from time to time.

As part of the architectural survey, a complete model was made of the whole of the ashlar casing to the eight piers, and the condition of each stone was recorded.

As part of the work of strengthening the piers, a system of sixteen stainless steel tie bars, of which eight were 4 inches in diameter and eight 3 inches in diameter, were inserted at gallery level, to connect the end of the piers with the inner walls and bastions. They were attached at one end to the masonry and a system of bracing inserted on either side of the radial walls to tie the drums together, and thus restore the bond which Wren had intended.

The aim of those responsible for the restoration work has been to fortify the building without marring its beauty, and as far as possible without interference with the historical value of Wren's craftsmanship.

In the exhibition are scale models, illustrating the method of boring previous to inserting tension rods in the drum walls; half dome area, showing the pier reinforcement, the tension rods through the drum walls, and the tie rods at triforium level and chains in stainless steel as used; and a dome pier from foundation to drum walls, showing accurate section cuts. There is also a Caen stone model, showing the intricate construction where the lantern rises from the brick cone. Other exhibits include pieces of Portland stone fractured by iron cramps rusting and concentrated loading, and specimens of worm-eaten oak from the roof timbers. Dominating the walls of the exhibition is the famous isometric drawing of St. Paul's by R. Brook-Greaves and W. Godfrey Allen.



The subject set was a "Museum of Archæology." The Museum was intended to provide accommodation for a large and valuable

THE ROME SCHOLARSHIP

WINNING DESIGN BY

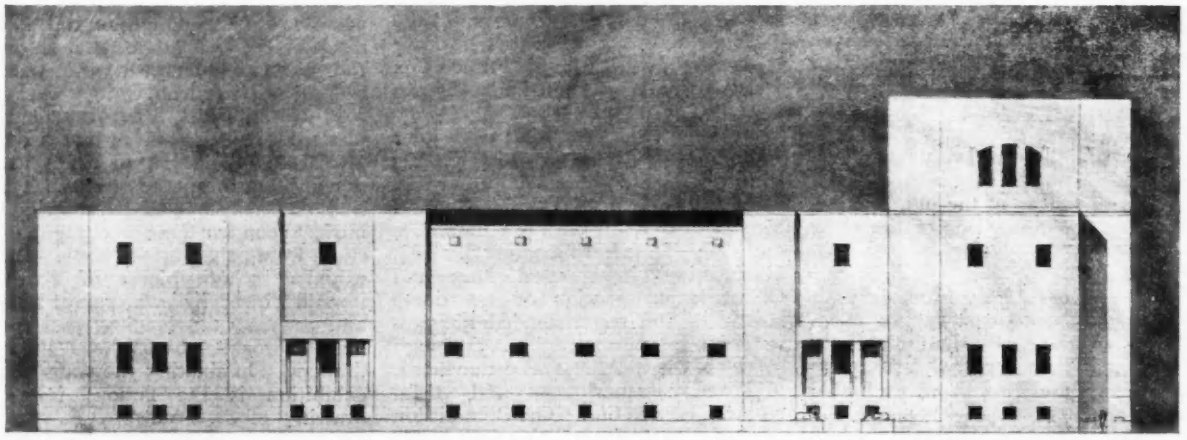
THE Faculty of Architecture of the British School at Rome have, as announced last week, awarded the Rome Scholarship in Architecture for 1930 to Mr. William Graham Holford, of South Africa, at present a fifth-year student of the School of Architecture, University of Liverpool.

The Rome Scholarship in Architecture is provided by an annual grant made to the British School at Rome by the Council of the R.I.B.A. It is of the value of £250 per annum and is ordinarily tenable for two years at the British School at Rome.

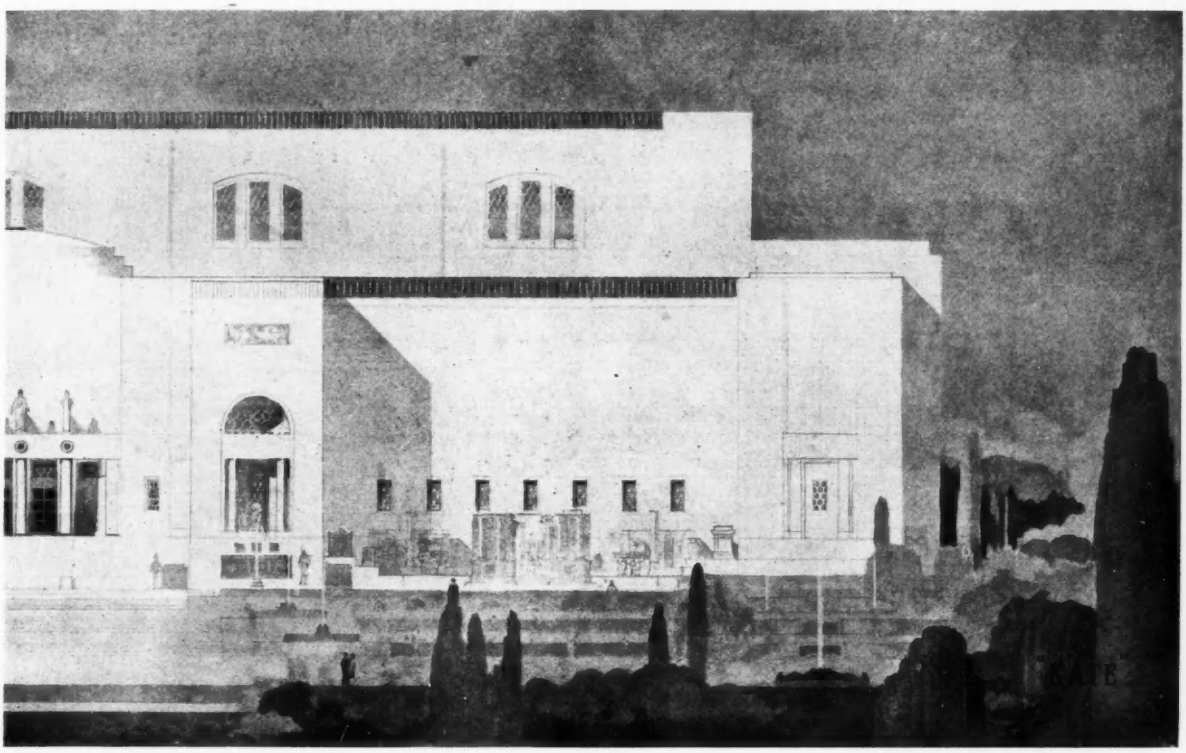
The subject set this year was a "Museum of Archæology," to be situated in the centre of an important Mediterranean city, and to provide accommodation for a large and valuable collection of architectural fragments found among the remains of an ancient city excavated in the neighbourhood.

According to the conditions, the building was to be designed on a rectangular site, 300 ft. by 275 ft. One of the elevations would face an existing public garden, from which it would be separated by a thoroughfare 60 ft. wide. It was not obligatory to build on the whole area, and it was suggested that a forecourt could be formed to isolate the building from the roadway. The other three sides of the site were to be surrounded by wide roadways.

The site of the Museum was level, but the gardens on the opposite side



The side elevation; and transverse section. In the design of the building elaborate decoration and detail was not desired, and the effect of the building would depend, both externally and internally, on its architectural character and proportion. The



collection of ancient architectural and sculptural fragments. Reproduced above is the main elevation of the winning design.

IN ARCHITECTURE, 1930

WILLIAM G. HOLFORD

of the thoroughfare sloped away from the road and were arranged in a series of shallow terraces, adorned with ornamental water, statuary and exotic trees and plants.

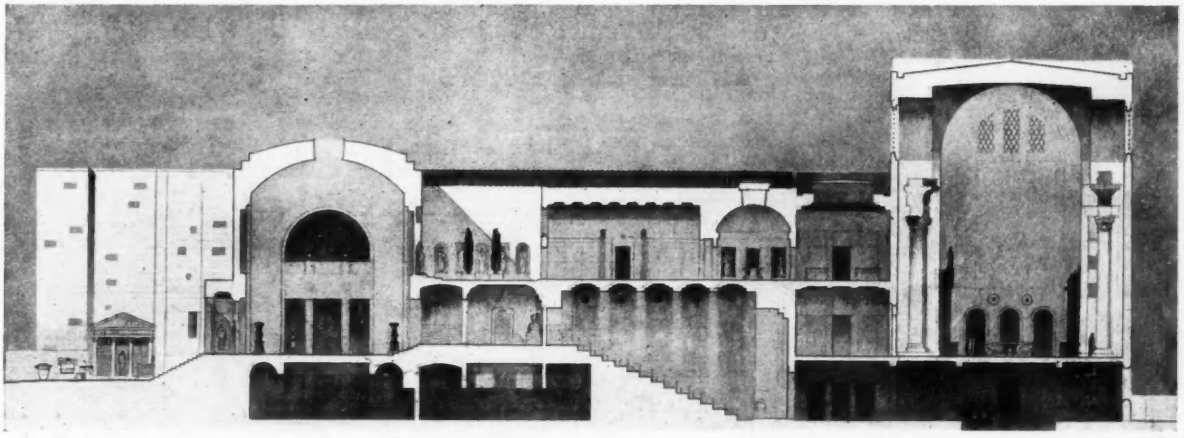
The main doorway would face the gardens, forming the only entrance for the public. Other entrances were required for the staff, lecture room, and for tradesmen in connection with the refreshment rooms.

Access would be provided for cars to the main entrance and carts to the basement for the delivery and removal of exhibits, etc.

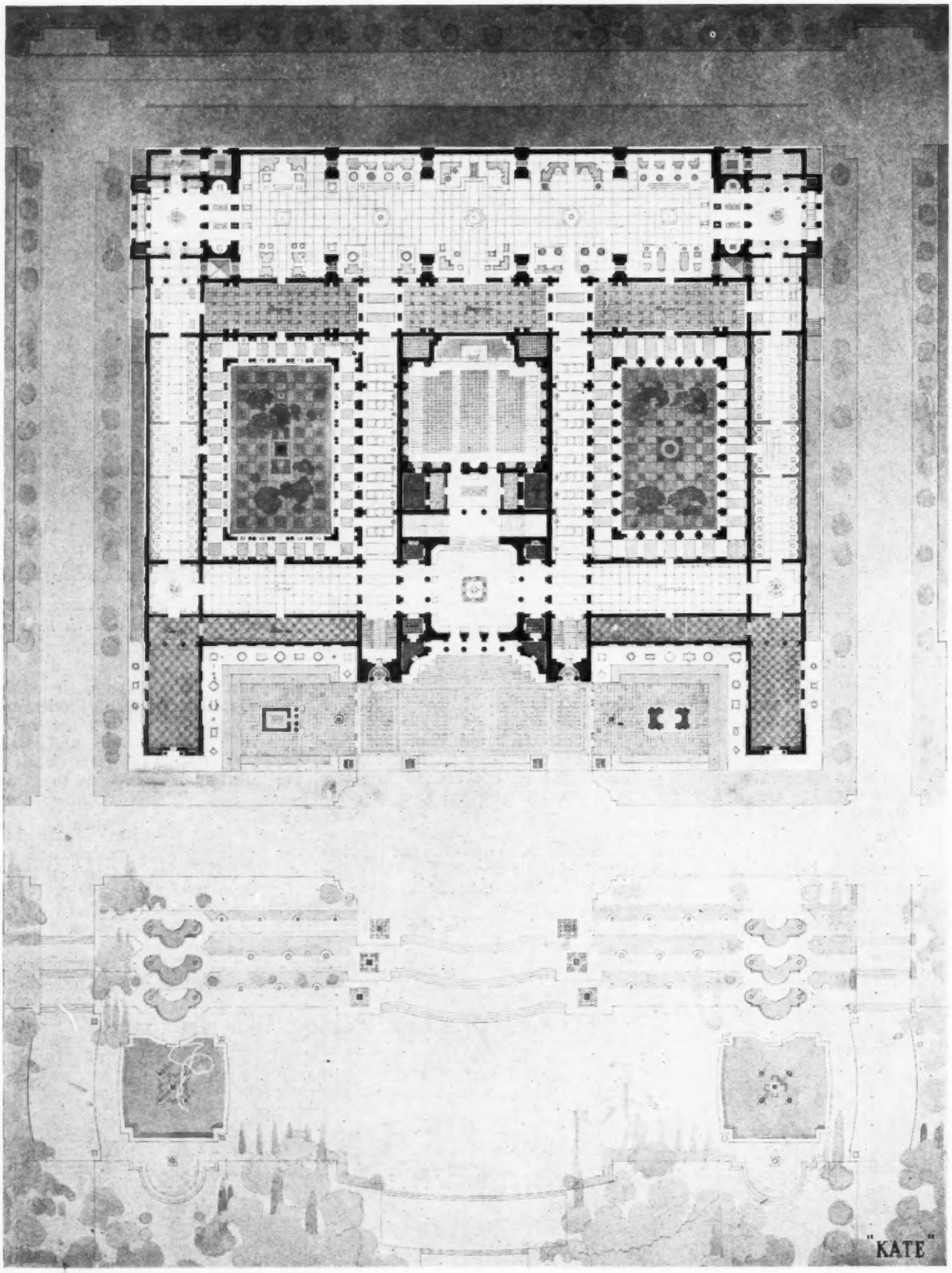
The Museum would comprise two floors and a basement. It was stipulated that every effort should be made to obtain an adequate area of exhibition space. The wall surfaces throughout should provide a background for statuary, and the lighting of galleries be arranged so that the conditions of exhibition would be as perfect as possible.

It was desirable that the doorways should not be too large, should be centrally situated in the galleries, and so arranged as to afford the easiest supervision possible and enable the public to make a complete circuit of the galleries without having to retrace their steps through rooms already visited.

The designs submitted in the final competition will be exhibited in the R.I.B.A. Galleries, 9 Conduit Street, W.1, from June 30 to July 5. Those of the winner are reproduced on this and the following two pages.

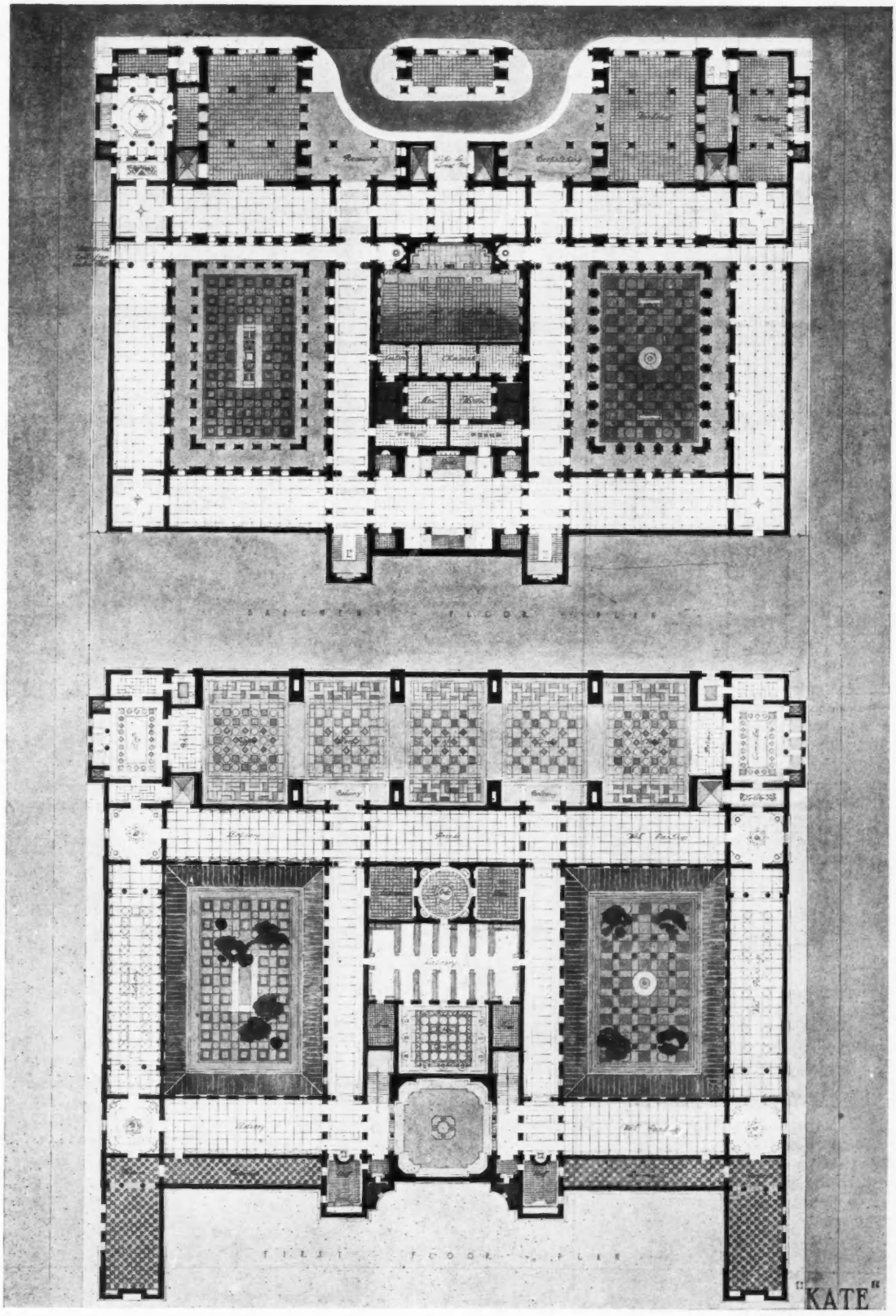


building was to comprise basement, ground and first floors. There was to be only one entrance for the public, other entrances being provided for staff and exhibits. The aspect of both drawings is taken from the right of the plans (see overleaf).



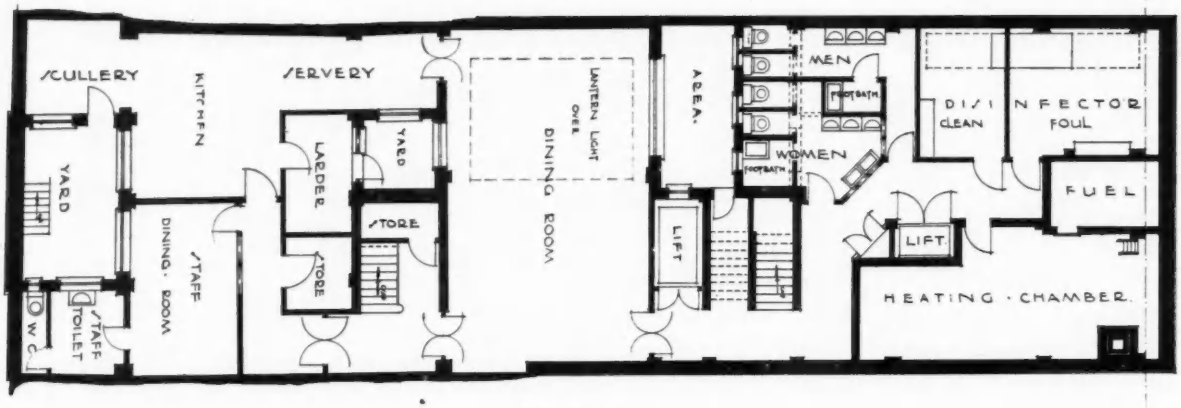
Rome Scholarship Competition : Winning Design.]

The museum would be erected on a site 300 ft. by 275 ft., with the main front facing an existing public garden, separated from the site by a thoroughfare 60 ft. wide. The other three sides of the site were to be surrounded by wide roadways. The main features of the ground floor (above) include entrance hall, lecture theatre, a hall for exhibition of large architectural fragments,

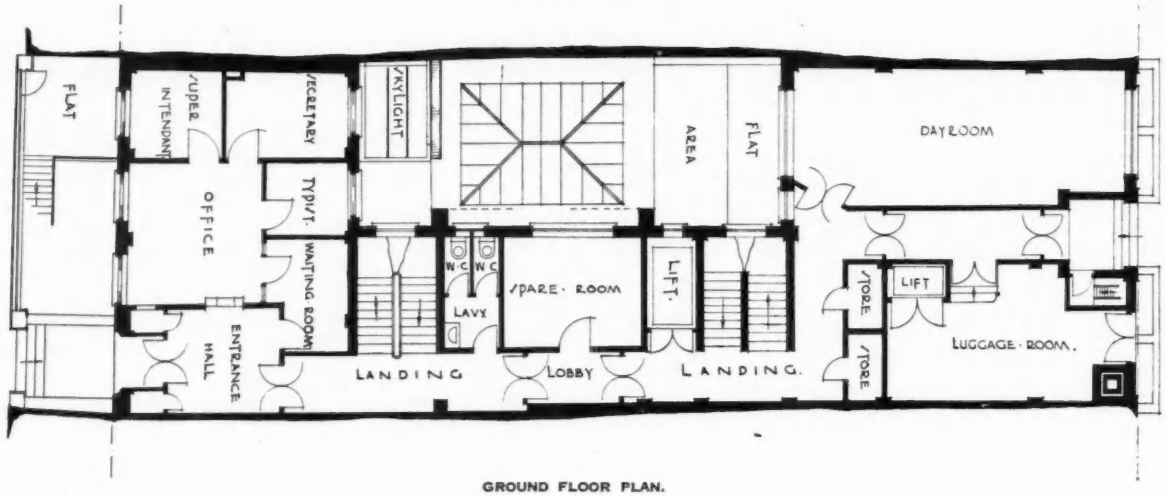


[By William G. Holford.

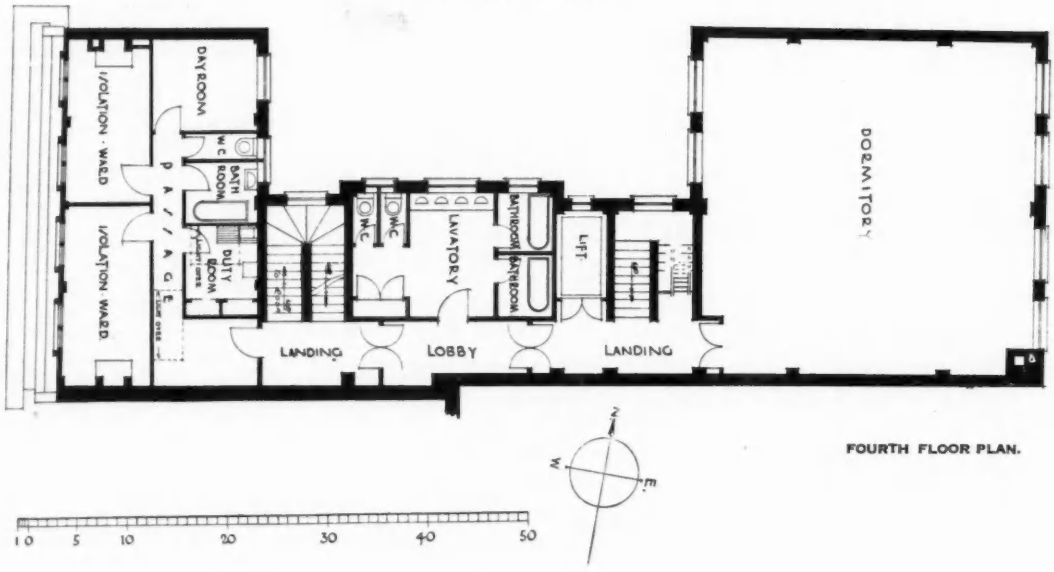
and a series of smaller exhibition rooms. The first floor provides exhibition galleries, print-room, library, committee room, and rooms for the administrative staff. The basement (upper plan on this page) comprises storage space, heating chamber and engineering department, refreshment room with kitchen and services, and lavatory accommodation.



BASEMENT PLAN.



GROUND FLOOR PLAN.



FOURTH FLOOR PLAN.

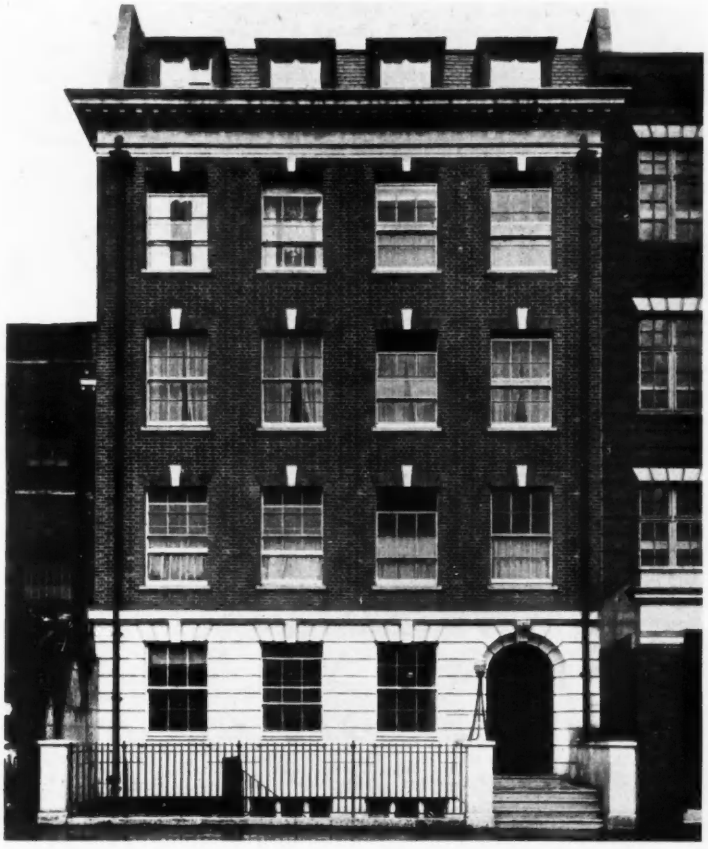
Jews' Shelter, Aldgate, E.1.] [*By Lewis Solomon and Son.*

Basement, ground- and fourth-floor plans. The building is six stories high. Each upper floor consists of a large dormitory, with baths and lavatory accommodation adjoining. The first and second floors are for women, the third and fourth for men. Isolation wards and superintendent's quarters are also provided.

JEWS' SHELTER

ALDGATE E.I

DESIGNED BY L. SOLOMON & SON



The front elevation, facing Mansell Street, is of multi-coloured stock bricks, with Portland stone dressings. The building is of fire-resisting construction. It is carried on a steel frame (see view below) and is designed to comply with the London County Council 1909 Act.

THIS new building, at 36 Mansell Street, has been erected to house the Jews' Temporary Shelter, which for forty years has carried on at 82 Leman Street, Aldgate, the work of assisting immigrants and trans-migrants in London, irrespective of their creed. It is six stories high and comprises basement, ground and four upper floors.

There are two entrances to the building, one from Mansell Street and the other from West Tenter Street. The former is the main entrance and leads through swing doors into the entrance-hall, on the left of which are the waiting-room, the general offices and the offices of the superintendent, secretary and typist. Beyond are two staircases and a lift, leading to the basement and upper floors, " dayroom " accommodation for the occupants, luggage and spare rooms.

Each of the upper floors consists of a large dormitory, each holding thirty beds, with baths and lavatory accommodation adjoining. The first and second floors are for women and the third and fourth for men. Other accommodation on the first three upper floors includes further administration offices and superintendent's quarters.

On the fourth (the top) floor, in addition to the dormitory, is an isolation department. This has been provided for cases of serious illness, and consists of two isolation wards, day and duty rooms.



A photograph of the steel framework in course of construction. It is taken from the same view-point as that of the front elevation reproduced above.

In the basement is a large dining-room, planned in the centre of the building between the two staircases and lift. On one side of the dining-room are the kitchen, scullery, staff dining-room and toilet; on the other the disinfector chambers, heating chamber, lavatory accommodation and foot-baths for the male and female occupants.

The foundation stone of the new building was laid in January last by Mr. Albert van den Bergh, whose grandfather, the late Simon van den Bergh, of Rotterdam, was a very prominent member of a similar society that did much to help co-religionists on their journey to America, before emigration to that country was restricted.

The present shelter was founded by the illustrious Herman Landau, with whom helping any human being buffeted by misfortune was a veritable passion. During last year the number of inmates who stayed at the old shelter was 1,784, of whom 1,708 were Jews and seventy-six non-Jews. The majority of them came from Latvia, Lithuania and Poland, and went to British colonies—1,426 to South Africa, thirty-two to Australia, and thirteen to Canada. The number of meals supplied for the year totalled 62,662 and the number of lodgings 13,853.

BRITISH ARCHITECTS' CONFERENCE

THE ninth annual conference of the R.I.B.A. was held at Norwich on Wednesday, Thursday, Friday and Saturday last. At the conference meeting at Stuart Hall, on Thursday, the President (Sir Banister Fletcher, F.S.A.) presided, supported by the Lord Mayor and Lady Mayoress of Norwich (Mr. and Mrs. H. Harper Smith), the Sheriff (Mr. C. Watling), the President of the Norfolk and Norwich Association (Mr. Stanley J. Wearing), and Mr. E. T. Boardman (Past President of the Norfolk and Norwich Association).

In the course of his address he said: I should like to put forward a plea to the people of Norwich to lend their aid to preserve the wonderful old churches, country houses and villages of East Anglia. Let us have a care of these buildings which have served well in the past, and, if possible, utilize them for the present.

Mr. W. Harding Thompson then gave his paper on "Regional Planning, with special reference to Norwich and Norfolk," from which the following is extracted:—

Norwich dominates its county to a degree seldom found in the capitals of other English counties. This dominance is due to its many attractions—economic, social and ecclesiastical. Moreover, its quite remarkable number of radial arteries link up the city with the whole region, and these radials are connected by an admirable number of circumferential roads within and without the city boundaries. This "spider's web" road system, together with a clearly defined central open space (the Tuesday Market Place), provides a sound nucleus for all future developments.

The intimate connection between Norwich and its satellite towns and villages suggests that no plan for future development, however efficient, should be confined to the existing borough boundaries. Traffic, ribbon development and sporadic building by the speculative builder, do not recognize any such limits except as a boundary line on paper. One has but to study for a moment the map showing the excellent system of bus services that ply on every radial road from Norwich to realize that all land with road frontage on these routes has a prospective building value. Time and cost factors are more important today than mileage in determining the areas where development may take place if land comes into the market.

It is essential, therefore, that some control over the region immediately surrounding the city should be obtained as soon as possible by a joint town-planning scheme. Such a joint scheme might comprise the county boroughs of Norwich and Great Yarmouth and the rural districts of East and West Flegg, Blofield, Hemstead, Forehoe and St. Faiths. This might be an executive committee under the Act, each local authority having representatives on the committee.

Much of the land in the above-mentioned area is purely agricultural, and it could be "zoned" on the plan as "undetermined," and building only allowed by consent of the authorities, or it may be possible to reach agreement with owners that the land may voluntarily be reserved for agricultural purposes so that the building development may take place round well-defined centres of population instead of straggling out along the existing roads.

The present town-planning scheme for Norwich appears to be admirable as far as it goes, but if any further encroachment is contemplated on its agricultural belt it should be borne in mind that extensions of the built-on area beyond that shown on the plan will probably increase the cost per head of population for administrative and other services out of all proportion to the benefits derived from increased rateable values. It may therefore be more economical to encourage the growth of the adjacent towns and villages rather than add unduly to the size of Norwich itself, which already exceeds 120,000 inhabitants.

Among those who took part in the subsequent discussion were Mr. Rodney Alsop (Vice-President of the Royal Victorian Institute of Architects); Mr. E. G. Cohen (Past President of the Royal Institute of Architects of Western Australia); Mr. Gordon West (hon. treasurer of the Royal Architects' Institute of Canada and Vice-President of the Ontario Association of Architects); Sir John Sulman, a pioneer of town planning in Australia; Mr. Stanley C. Ramsey; Mr. H. C. Hughes; Professor Patrick Abercrombie; Mr. J. A. Kidd; Mr. R. B. Walker (of Nigeria); Mr. Wightman (Past President of the Queensland Institute); and Mr. Stanley J. Wearing.

The conference banquet was held in St. Andrew's Hall on Friday.

Mr. Sydney D. Kitson, proposing "The City of Norwich," said: Your cathedral equals in architectural interest any other cathedral in England. Your fine, grand castle seems to have been designed with a particular vision, which is rare, even among architects, eight hundred years ahead, as a perfect setting for the reception which we were privileged to attend last night. Your mediæval Guildhall and your old churches, with their exquisite flint work which meet one at every turn, are a delight to the eye. The halls of your merchant princes have been preserved for the benefit of the public by the piety of Leonard Bolingbroke and of the Misses Colman. Your sober and sensible eighteenth-century brick buildings have been described by the President of your Architects' Association. Your great Roman Catholic Church of Gilbert Scott the Second, the gifted father of a still more gifted son, is one of the outstanding buildings of the nineteenth century. The various housing schemes which have been planned around this city of gardens are among the best in the country.

The Lord Mayor responded.

The Sheriff of Norwich (Mr. C. Watling) also replied to the toast. He said: We are sorry you are a little too early to see the finest block of municipal buildings and town hall in England. May the day come when one of you may bless the ancient city of Norwich for the chance of designing and erecting her new town hall, and, when you have done it, may the city find it still possible to bless you.

The Very Rev. the Dean of Norwich (Dr. D. H. Cranage) proposed the toast, "The Royal Institute of British Architects and the Allied Societies." He said: I should like the Institute and the Allied Societies some time to consider whether, in every respect, their rules of competitions are wise. You can scarcely expect a great body to take the one architect that the assessors choose and to give them no choice whatever. It would not be unreasonable to leave the final design to a responsible body like the Lord Mayor and Corporation of Norwich.

The President, responding, said: The time has come when some sort of control must be exerted in order that buildings ugly and ill designed should be prevented from being erected in any part of this country. In order to effect that a Rural Amenities Bill, as it is called, was introduced by Sir Hilton Young, once a very popular Norfolk Member. It was not successful in passing this year, but I am told by Mr. Greenwood, the Minister of Health, that he has in preparation a Bill of that kind which it is hoped to being forward in Parliament next year, and which will, I hope, receive assent.

Mr. Edward T. Boardman proposed "Our Guests," and Sir Bartle H. G. Frere responded.

Mr. Stanley J. Wearing, President of the Norfolk and Norwich Association of Architects, also responded.



ENGLISH PRECEDENT No. 121

SHOP FRONT, PULTENEY STREET, BATH

Pulteney Street is part of a finely-conceived extension of the Bath plan, carried over the River Avon on to the meadows beyond.

This shop and its vis-à-vis mark the widening from the bridge into a wide octagonal crossing, so that the projecting shop front is not only charming in itself, but a very essential part of the street design, as providing additional emphasis at the entrance or exit of the bridge approach.

The heavy, finely-finished appearance of the wooden front is exactly necessary to the work for which it is called, and though it is sombre in dark paint, it would perhaps be as wrong in white paint, being entirely removed from the strict wood tradition.

—[E. MAXWELL FRY]

LETTERS FROM READERS

Priced Bills of Quantities

SIR,—The Honeywood Papers appear to be developing on lines traditionally associated with Victorian Christy Minstrel entertainments of happy memory.

Karshish (seeking new worlds to conquer) emerges from the corner seat allocated to the leading comedian, and complicates the programme with melodramatic close-ups calculated to make the flesh of the youthful professional practitioner creep.

"How do, Karshish?" says, in effect, Karshish No. 1 (disguised as a funny man).

"Hullo!" replies Karshish No. 2 (disguised as the arbiter on problems of professional practice). "Kin you tole me, Massa Karshish, what am de diff'rence between . . ." etc., etc.

The situation is becoming so complicated that ordinary subscribers to your JOURNAL, such as myself, do not know exactly where Karshish No. 1 (the funny man) ends, and Karshish No. 2 (in his advisory capacity as arbiter on problems of professional practice) begins.

When, however, Karshish asserts, in italics, that an architect has no right to inspect a contractor's priced bills of quantities, I venture to submit that Karshish No. 1 is encroaching on the preserves of Karshish No. 2.

The situation should be clarified. Otherwise we may have Karshish (No. 1 or No. 2) questioning the established principle that a householder has the right to inspect the meter installed by the gas company in his own house.

F. R. JELLEY

The Economics of Steel

SIR,—In your issue of June 4, Mr. C. J. Kavanagh has stated a powerful case for the investigation of steel structural design and the building regulations relative thereto, and it is gratifying to know that the personnel of the committee presently engaged in formulating an interim report is so strongly representative of the science, commerce and practice of British steel construction at its best.

From his letter I extract the following: "Instead of one good national standard—if building must be controlled—there are a dozen indifferent ones, with various degrees of interpretation." These sentences state the case succinctly, and they are as significant as they are brief; not the least significant being the interpolated "if building must be controlled." This, in itself, raises a vast question on which there must be a variety of opinion. An eminent engineer remarked to me recently that *it might not be a bad thing if there were no building regulations at all*, and there is something to be said for this point of view. The expert steel engineer is as knowledgeable and conscientious as the building authority in control, and reactionary regulations imposed on him may be regarded as a penalty he has to suffer on account of the possibility of the less admirable practices of unqualified others. Also, modern building requirements are as changeable as women's dress, and the standard of today is old-fashioned tomorrow. Mr. Kavanagh says that "hitherto, regulations have been deplorably static"; but is it not in the nature of regulations to be static? Can regulations for such a thing as building construction be devised to march with the times? At the best, do they not restrict our advance to a series of jumps, at long intervals, which always land us behind one who has made continual progress? But these reasons for "No building regulations" are, I am afraid, for a society more perfect than ours is.

Therefore, postulating the necessity for some control, surely the consensus of opinion will be that the control should be good and uniform throughout the country.

Expanding Mr. Kavanagh's statement, the building controls throughout the country, applicable to steel construction, present the following varieties: (a) The London area, subject to the L.C.C. regulations and the interpretations of the District Surveyors; (b) Areas which have adopted the L.C.C. regulations; (c) Areas which have adopted the recommendations of the Institution of Structural Engineers; (d) Areas which have made bylaws under the Public Health and Police Acts; (e) Areas which have no bylaws.

In (b), (c) and (d), the interpreter is usually the borough or county engineer; in (d), the bylaws are usually incomplete, often out of date, and frequently neglected; in (e), anything may happen.

This variety of control, if it can be called control, reacts in more ways than can be described in a letter. Important effects are: (1) similar buildings cost more in one area than in another; (2) in a particular area the bylaws may be interpreted so strictly that steelwork is penalized in favour of some other method of construction; (3) efficiency and economy of design is not encouraged; or (4) ignorance is given a free hand.

The L.C.C. regulations are not ideal, but neither are the conditions ideal in an area without bylaws, where one official is the sole arbiter. Probably the majority of steel designers and users would prefer a happy medium code applicable throughout the country.

Of all building materials, structural steel is the most uniform and least affected by local conditions; so it does not seem reasonable that a design, acceptable in the north, might be rejected in the south, and *vice versa*. Further, however appropriate and necessary it may be, it should not be possible, as it is possible, to design steelwork more economically for the capital of Scotland than it is to do so for the capital of England.

If the L.C.C. regulations form a basic document of the investigation, it is to be hoped that no myopic vision will be concentrated on them, but that a telescope may be trained on the farthest parts of the kingdom and of the Empire. A high degree of efficiency has been attained in some districts, and some local engineers might not see advantage in a happy medium that meant advancement for London but retrogression for them.

There is also the danger that the recommendations of such a strong committee, by the very reason of its strength, may become more static.

There is no doubt in my mind that the committee have these considerations in view. I am also in full agreement with Mr. Kavanagh that our building regulations affecting steel construction are in a parlous state; that nothing short of the committee he has described can rectify the position, and that the code to be evolved should be of national application.

W. BASIL SCOTT
(Redpath, Brown & Co., Ltd.)

The Ionic Architectural Club

SIR,—On behalf of the members of the above club I would like to tender you our great thanks for your excellent advice on the art of sketching which appeared in the June 4 issue of THE ARCHITECTS' JOURNAL.

With every respect for your Sketch Club, I would like to say in passing that ours was founded by the example of the Doric Architectural Club at Oxford, now in existence for over two years.

Nevertheless, we hope to glean useful knowledge, not only from your club but also from the numerous instructive articles in your periodical.

Your Holiday Sketching Competition is an excellent idea; but don't you think that there should be an age limit? We younger students do not stand much chance against the more mature members of the profession.

Would it not be possible some time in the future to arrange a series of articles on architectural design or history for the benefit of students who do not attend full-time architectural schools?

Once more thanking you for your

advice and also for the great encouragement you have given the Club by billing us so prominently in your excellent JOURNAL.

S. A. G. COOK, Hon. Sec.,
Ionic Architectural Society.

Efficiency in the Drawing Office

SIR,—My Executive Council suggest that the readers of your JOURNAL, as representing the considered opinion of the architects and draughtsmen of this country, might be interested in the letter which this Association is sending to the responsible heads of British firms which have their own drawing offices.

This Association is aiming at extending the scope of its usefulness by taking into partnership on technical and scientific matters the users of its products; its members are willing to pool their own knowledge and place it at the disposal of any buyer who cares to put his problems forward.

ALFRED W. FOSTER, Secretary,
The Drawing Office Material Manufacturers' and Dealers' Association.

The letter sent out by the Association reads as follows :

DEAR SIR,

Some twelve years ago, in order to improve and give impetus to a trade that had fallen to a very low level, the drawing office material manufacturers and dealers of Great Britain came together and formed themselves into what is now known as "The Drawing Office Material Manufacturers' and Dealers' Association."

This association comprises the whole of the firms originally connected with our industry, many of them household names with world-wide reputations. Individually, these firms have rendered very great service to engineering as a whole by their inventions of instruments, apparatus and processes which have been of incalculable benefit to individuals as well as to employers in increasing the efficiency of the drawing office.

It is felt that, although great advances in technical processes have been attained by the manufacturers themselves acting in harmony, still further progress could be made if the co-operation of the actual users of our various commodities could be secured. Difficulties may be experienced by the practical engineer and draughtsman which do not suggest themselves to the scientific adviser of the manufacturers, but which, if the problem were presented to him, he might be able to solve.

The association has therefore established a permanent committee whose sole duty is to ascertain in what way this industry can help to increase the efficiency of the drawing office, and this letter is being addressed to the principal engineering firms of this country as an appeal for practical co-operation.

This association will greatly appreciate your notifying them of any matter in connection with your drawing office wherein their collective experience may be of assistance.

An answer will be appreciated, as by availing yourself of our offer you will be placing yourself under no obligation of any kind ; on the other hand, you will materially assist us by directing attention to new ways in which our organization may increase its usefulness to those whom it desires to serve.

Yours faithfully,
(Signed) ALFRED W. FOSTER,
Secretary.

Settling-Up Honeywood : v

DEFECTS ARE REPORTED

BY KARSHISH

(H. B. CRESWELL)

Honeywood has been in the occupation of the owner, Sir Leslie Brash, for some weeks. Serious complaint has been made of smells in the house, which Lady Brash attributes to the drains. Grigblay, the builder, however, can find nothing wrong, and Spinlove, the architect, has strongly discountenanced the idea that anything is. Grigblay has asked £1,500 on account of extras. Spinlove has called for statement of account showing how the figure is arrived at, and has assumed that Grigblay has overlooked certain omissions.

GRIGBLAY TO SPINLOVE

Dear Sir, 14/4/26.

We have been pressing on with our statement of account as you ask, and are arranging with Mr. Tinge to meet us for the purpose of measuring variations. We find that the total balance of extras on the variations account will be in the neighbourhood of £1,800, and shall be glad if you will pass us a further certificate for £1,000.

Yours faithfully,

SPINLOVE TO GRIGBLAY

Dear Sir, 16/4/26.

I am astonished to learn that your account will show extras to the amount of perhaps over £1,800. I was quite unprepared for anything of the kind, and I am sure Sir Leslie Brash will be shocked at the figure. I certainly have not authorized extras on any such scale, and have no idea how the figure is made up. I must have a summary of items, showing how the amount is arrived at, before I can consider drawing a further certificate.

Mr. Tinge has no authority to measure any work except as I may direct. It is necessary for me to have the summary before I can do this.

Yours faithfully,

SPINLOVE TO TINGE (QUANTITY SURVEYOR)

Dear Mr. Tinge, 16/4/26.

Grigblay is preparing his final statement of account. Will you please note, however, that no work is to be measured except as I may direct, as I have reasons to fear that the account is inflated with unauthorized extras. I have asked Grigblay for particulars of the work to be measured, and will let you know what is wanted in due course.

Yours truly,

Spinlove's arrangements are good, though his manners to Grigblay are not. The measuring of work by the quantity surveyor, or even by the architect, does not establish an authorized extra, but it certainly supports a claim for one. The quantity surveyor, also, has to be paid for the work he does in fees that are added to the account, so that it is the architect's duty to see that no other measuring is done than the needs justify. Extras often consist in differences between the value of work specified in the contract and the same work as carried out; and as the only way to arrive at this difference is to measure and value the whole of the work replaced, and also that which replaces it, and strike a balance, it may happen that the surveyor's fees for measuring and pricing £2,500 of work twice over is tacked on to a resulting extra (or omission) of only £50. It is therefore sometimes expedient for an architect to agree a figure with the builder. On the other hand, the builder will be inclined to charge as day work (time and material) extra work which ought in the interests of the client to be measured and priced at the contract rates, or at rates commensurate therewith.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 19/4/26.

May I be permitted to remind you that you have omitted to transmit Mr. Grigblay's report on the odoriferous effusions which, I regret to say, still persist in continuing.

We continue to be delighted with the house, which will be quite perfect when sanitary amenities have been safeguarded, but we have observed various slight defective flaws in the building work. These are not so far imperatively serious, but need preliminary attention. Dripping taps can speedily be renovated, I conceive, also little cracks in the plaster ceilings which may otherwise increase. Stains in the wall-papers are, I fear, a more serious apprehension. There are openings in the woodwork, specially in the overmantels to fireplaces in the first story, and *most alarming gaping cracks* in the exterior oak window frames, particularly on the outside. Steps should at once be taken to prevent these cracks increasing in dimensions. Some are several inches in length, and in breadth wide enough for me to almost insert the terminal edge of a sixpence. I have prepared and transmit under this cover, for your convenient guidance, a scheduled list of the defects I have noticed as obtaining; but your trained eye will no doubt have no difficulty in discerning others.

With regard to the Riddoppo, this has a delightful lustrous appearance, and its variegations of different tints is charming, but it leaves stains where the under bottoms of doors rub over the carpets, which will only imperfectly brush out; and it has failed, I am

informed, near the range in the kitchen. Mr. Grigblay should be notified.

Yours sincerely,

Brash's "scheduled list" is missing from the file, but if it is fairly represented in the above letter the "defective flaws" are nothing to complain about (so far) except, of course, Riddoppo. Brash has not realized what is happening to his new novelty super paint.

SPINLOVE TO GRIGBLAY (PERSONAL)

Dear Mr. Grigblay, 20/4/26.

I reported to Sir Leslie the substance of your letter describing your investigation of supposed smells, and he has since twice asked for a verbatim copy of your letter. I cannot possibly send it him—besides, it is a private letter—so will you let me have a version suitable for sending to Sir Leslie. I enclose the original in case you should not have kept a copy.

Yours truly,

Spinlove is unwise in allowing Grigblay to write to him confidentially, but more unwise in his method of disguising the fact. He has a frank, straightforward nature; slyness is foreign to him, and must be distasteful. He could perfectly well have replied to Brash: "Grigblay reports as follows: He says . . ." and completed an accurate paraphrase in that form. If Brash were so obtuse as to press for the original, he could be told it was a private letter.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 20/4/26.

The blemishes of which you send me a list are only what appear in all new houses, and do not point to serious defects. Grigblay will do all necessary restoration, but this will be in six months' time, when such defects as there may be have fully developed. Of course, if anything goes wrong he will send down and put right, but it appears that nothing has. Certain sulphates or other exudations appearing on the face of new plaster kill the colour in wall-papers, which is why I recommended only tinted lining papers, designed to serve as a foundation for the better papers you may afterwards decide to hang. The cracks in the oak frames are of no consequence. They are characteristic of English oak.

Yours sincerely,

PS.—I will send you copy of Mr. Grigblay's letter tomorrow.

This pretence of an afterthought in order to gain time is deplorable. Thus does one deceit involve others. Spinlove's comments are well-informed, but by omitting all reference to Riddoppo and thus including its failure with defects that are "not serious," he may be applying Grigblay's advice to "take no notice" too drastically.

GRIGBLAY TO SPINLOVE

Dear Sir, 22/4/26.

We enclose report for Sir Leslie Brash, and return original of Mr. Grigblay's letter.

Yours faithfully,

GRIGBLAY TO SPINLOVE (ENCLOSURE)

Dear Sir, 6/4/26.

I called at Honeywood on the 5th instant to examine into the effluviums and emanations complained of, but I could not ascertain any olfactory aggressions indicating blemishes in the sanitary provisions.

There was a bit of odoriferous exhalation in the scullery, and a whiff of noxious emanation in the yard, because the domestic staff had removed the grating out of the scullery sink instead of emptying the grease-trap. Unsavoury effluviums from the yard gully are due to the grating being missing and the drain being too small to pass the size of scrubbing brushes used.

The obnoxious exhalations in the bedrooms is due to windows being kept shut and chimney-throats stopped; but it is likely that there is down-draught in some of the flues owing to them being damp as yet.

Yours faithfully,

Spinlove asked for a report so worded as to be suitable for sending to Sir Leslie Brash, and it is probable that Grigblay supposed it was intended he should adopt Brash's euphemisms, and that his inveterate habit of irony, his lack of literary accomplishment and his impatience of nonsense, did the rest: he did not understand what was wanted and resented the folly of what he was doing. Grigblay's habit of veiling his irritation by irony is so ingrained that he is likely to be in great part unaware of the gorgeous effects he sometimes gets. Some such explanation seems necessary. We can imagine that Grigblay is unaware here, as elsewhere, of the vividness with which his letters reveal his state of mind.

SPINLOVE TO GRIGBLAY

Dear Sir, 23/4/26.

I am much obliged for Mr. Grigblay's report on drains, but I think that Sir Leslie Brash might misinterpret certain passages. I have, therefore, altered some of the terms and return the report. If Mr. Grigblay will copy it as amended and sign, I will send it to Sir Leslie.

I am still awaiting your summary of variations account.

Yours faithfully,

GRIGBLAY TO SPINLOVE

Dear Sir, 24/4/26.

We have re-written report as you suggest and enclose same. We hope that this now ends the matter.

Yours faithfully,

GRIGBLAY TO SPINLOVE (ENCLOSURE)

Dear Sir, 6/4/26.

I called at Honeywood Grange on the 5th instant to investigate complaints of smells, but could find nothing wrong with the drains.

A smell in the scullery was due to the removal of the grating of the sink, and to the container of the grease-trap not being emptied. The flooding of the yard gully is due to the grating being missing and scrubbing brushes getting into the trap.

The stuffy smell in the bedrooms is partly due to windows being kept shut and chimney-throats stopped up, but it is likely there is down-draught in the flues owing to their being damp as yet.

Yours faithfully,

A very colourless version! Spinlove has ventured, it will be noticed, to touch up Grigblay's grammar.

BRASH TO SPINLOVE

Dear Mr. Spinlove, 24/4/26.

I note your comment anent the subject of blemishes. So long as we are not inconveniently incommoded I am quite willing to permit matters to stand over for the present, on the understanding that Mr. Grigblay is previously advised beforehand and comprehends that the increase in defects due to the remissness of his attentions is a matter for which he solely is responsible. I certainly consider, however, that it would be advantageously to his interests to intervene before the increase in blemishes become more aggravated, as I apprehend that a small defect is more readily ameliorated than one of greater magnitude, and that the anticipated augmentation of cracks, for example, is better prevented than cured. That, however, is a matter for your and Mr. Grigblay's eventual decision.

Since I wrote, a new defect has appeared, which needs immediate attention, as it is causing the establishment considerable unnecessary inconvenience. On Thursday afternoon last, at about 4.25—so far as I can precisely ascertain—it was observed that when the push in the drawing-room was depressed the front door bell rang; and it subsequently transpired all the other pushes rang the front door bell, and that the bell-pull at the front door rang the bell in the lady's maid's room on the second floor instead of its own. As the indicator has also ceased to appropriately function, the considerable consequent inconvenience can be imagined, and is not—may I be permitted to say—what I feel is compatibly to be expected when a house is designed by a qualified architect and erected by an expensive builder. I shall be gratified if you will ring up the house tomorrow and instruct us in what it is desirable to do.

Your communication omits to intimate anything regarding Riddoppo super paint. My apprehensions on this question are commencing to engender considerable doubts, as a small narrow

strip was yesterday observed to have detached itself away from the wall above the skirting of the inner lavatory compartment adjoining the front entrance, and investigation indicates that similar disasters threaten to immediately eventuate in various other different positions. Inspection also substantiates that serious ridges and rims of paint, which break away from the surface in little crumbs and flakes that adhere to the carpets, are accruing in diverse localities which conclusively demonstrates that *Riddoppo is beginning to commence to disintegrate.* Immediate attention is most desirably expedient, and I request that Mr. Grigblay shall be informed that I expect immediate remedial precautions to be embarked upon at once, before it is too late.

May I intimate the reminder that you have not yet transmitted Mr. Grigblay's report on the sanitary anomalies. These cause me increasing apprehension. Also the damp places over the chimneys continue, although the promised remedy was intimated to be on the point of eventuating several weeks ago. Other evidences of damp places are now ocularly discernible in the corners of some of the first-floor sleeping apartments.

I have transmitted cheque to Mr. Grigblay, but still await promised figure of total sum of extra cost, for reasons already communicated.

Yours sincerely,

We have seen Brash making heavy weather of "blemishes" which do not amount to defects, or are of no importance: he has yielded to the weakness, common with owners of new houses, of crawling over every part with the minute scrutiny of an ant, instead of enjoying his well-planned and soundly-built house. The Riddoppo failure is, however, a serious matter.

SPINLOVE TO BRASH

Dear Sir Leslie Brash, 27/4/26.

I do not know in the least what has gone wrong with the bells, but, as I telephoned today, I have arranged for Grigblay to send an electrician to the house tomorrow.

I enclose copy of Grigblay's report on drains. I am sorry I omitted to send this before.

The necessary work in preventing damp appearing in chimney-breasts will have to be put off till the summer, when the brickwork has dried out. I will inquire into the cause of the other damp places you speak of. The house has hollow walls, and there cannot be much wrong.

I assure you that your fear of faulty drains is without foundation. I really do not know what more can be done.

I am sorry to hear that the Riddoppo paint is proving unsatisfactory. As you know, I never had confidence in it, and Mr. Grigblay objected to its use.

Yours sincerely,

There is a directness and brevity in this letter which, though perfectly appropriate to the occasion, indicates that Spinlove is busy in other directions and is getting tired of Honeywood. He has not followed Grigblay's advice of repudiating responsibility for Riddoppo, but he perhaps does better, at this juncture, in implying that the matter is Brash's concern, only.

MISS PHYLLIS BRASH TO SPINLOVE

Dear Jazz, 30/4/26.

This is to warn you to form a solid British Square, and prepare to receive cavalry, as Dad is on his high horse. You *are* a mutt. Dad even suspects a practical joke. This is what happened; no guy, honest indian.

We had a big house-warming dinner-party tonight, very swell and solemn, all the poshest of the posh, no one under about seventy, all good gargantuans with digestions treasured by leading physicians—Dad simply wallows in that sort of occasion: when the writing wobbles it is because I am laughing.

Mum and I were out with the car, and didn't get to home sweet home till nearly seven, to find the kitchen staff—as Dad calls them—waiting *outside* the kitchen door, which was open just wide enough to allow a choking smell of burning glue and feathers to be nosed. They could not get in to finish cooking the dinner, nor to stop it cooking. The back entrance was bolted, the windows all fastened—except the little top ones—and the door jammed; it would not open nor shut. I pushed my arm through, and found the door of the cupboard just inside pressing against the knob of the kitchen door, and the knob of the cupboard against the other, so that the door would not move either way. How it got fixed no one knows. The servants found it so at half-past five, after they had run to see an aeroplane stunting at the front. The gardeners had all gone, not a man was about, and so the loonies just waited, with sauces burning and everything going wrong inside, and nothing being done to get the dinner ready. The chauffeur fetched a ladder and reached through one of the little top windows with a golf club and undid a lower window, and, by heaving himself up against the door, freed it. You can imagine the to-do with all the arrangements knocked sideways. Dad had decided to wear his decoration, and Mum her tiara, but the poor things hadn't the heart. Of course, it would not have mattered if it had not been such a swanky occasion; but not a word was said, and the seventeen seventies sat solemnly marking time in the drawing-room with cocktails and caviare sandwiches, while the servants struggled and sweated in the kitchen, and the hired men gloomed in the hall, till nearly a quarter to nine. It is a thousand pities you were not invited—as you should have been—as the triumphant architect of the arrangements.

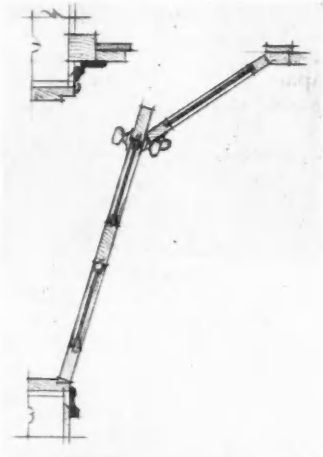
Ever yours,

PUD

Spinlove appears to have a friend in the enemy's camp.

This accident is extraordinary. Spinlove ought to have been more wary than to allow any door to open against another in such a way as to block its swing; such a chance is always in mind for the planner. It happened, however, that the kitchen arrangements at Honeywood were altered after the trenches had been dug and the foundations begun, and this unlucky fouling of doors may be the bequest of that revision. Afterthoughts and alterations are a frequent cause of such mishaps. When the plan is originally made the whole scheme is subject to minute concentration; but when alterations are devised there is great danger that all consequences of the changes will not be foreseen.

Fantastic as this misadventure may appear, it will seem so to the experienced architect or builder only for the grotesque catastrophe associated with it. It is, in fact, typical of the kind of accidents that frequently happen. Pud's description makes pretty clear what occurred. It is a thing that the most exact detailing by the designer and anxious care of the builder could scarcely accomplish, so that had the thing been—as Brash's irritation led him to suggest—a practical joke, it would have done honour to the ingenuity and assiduity of its perpetrators.



Spinlove's Automatic Self-Locking Door

The sketch here given shows what apparently happened. The title I have given it seems justified; for if anyone hereafter discovers a right use for the device, Spinlove ought, most certainly, to have credit for the invention.

[NEXT WEEK: VI—RIDDOPPO COMES TO THE BOIL]

QUESTIONS THAT ARISE

Measurement of Ironwork

R. U. L. writes: "*I am at present trying to settle an account, where a question of measurement for wrought-iron ornamental balustrading has arisen. The work is elaborate, and a rather heavy price per foot run was agreed. There are ramps at each floor, and to the landings. The method of measurement was never agreed upon, and the contractors contend that it should be measured on the handrail and girthed the whole way up.*"

It would have been clearer if the actual measurement had been agreed upon before accepting the price, or at least if the estimate had stated that the price was inclusive of all bends and ramps.

However, I consider the correct method would be to measure from the outside face of the bottom newel, for the whole length of balustrade to the outside face of the top newel. Or, if the handrail finishes against wall face at the top landing, take the measurement to the wall face. The measurement should be taken halfway up the height of the balustrade.

H. S.

Travel in Sweden

"Traveller" writes: "*Is there any architecture worth seeing in Sweden beyond the much photographed Stockholm Town Hall and the other now well-known modern buildings?*"

There certainly is, but it must be remembered that Sweden is a sparsely-populated country and the towns are far apart. In the south the Gothic cathedral of Lund is worth a visit, and the old castle of Kalmar. Near Stockholm are the palaces of Drottningholm (with gardens laid out like a small Versailles) and Gripsholm.

Västerås, to the east of Stockholm, is full of interesting old work as well as containing a fine but little-known statue by Carl Milles of Bishop Rudbeckins; further east, on Lake Hjalmar, is Orebro, with a typical moated castle. At the northern end of Lake Vettern is Vadstena, with the convent of St. Brigit and the huge castle of Gustavus Vasa, now, alas! only a shell, with some remains of the interior decoration on the ceilings and walls.

On the opposite side of the lake is Hjo, and near this little port is the abbey at Varnhem and the cathedral at Skara. The smaller Swedish towns are built almost entirely of wood, and to eyes accustomed to more lasting materials they have an unsubstantial appearance, but much of the detail is worth studying. Filipstad, north of Lake Vennen, is typical, with the wide streets and squares of wooden houses and the large white stuccoed church. Many of the small wooden village churches contain quaint carved and coloured woodwork and frescoes, and nearly all have the detached bell towers of curious design in the churchyards. One of the most accessible of these is Patila church, which can be reached from Göteborg by motor-bus, but farther north, in Varmland and Dalecaria, at Fujesta and Atops, there are good examples.

Nearly every farmhouse in Sweden that has escaped destruction by fire is worth a visit, as they are usually filled with examples of genuine peasant crafts, in a country where beauty is little talked about but unconsciously followed.

LL. E. W.

Projection of Cornices

S. T. writes: "*What is the following secret of the old architects? When a cornice is designed exactly in accordance with the proportions of a Palladio or a Gibbs the projection appears much more than on the detail and is usually far too heavy. In old work this is not the case.*"

This is a common mistake and arises from the fact that the section of the cornice shown in the textbook is a "true" section, whereas that seen at the angle of a building is on an angle of 45 degrees. If the true section is designed as follows the distortion will disappear:

The lines AB and AD on the accompanying sketch show the "true" projections, and AC that across the angle. On section, AE = depth of cornice, and DA, projection on true face, while FA = projection at C.

The angle AFE should not be more than 45 degrees to be pleasing, therefore the angle ADE must be more; actually it is 54 degrees 44 minutes, or in practice 55 degrees. Therefore in drawing the full-size detail the profile of the cornice should be contained within the triangle ADE so that when seen on the angle it will be within the triangle AFE.

Strangely enough the old writers do not seem to issue a warning on this matter, and draw their cornices at 45 degrees on face. But they practised better than they preached, and most of their cornices fall within the 55 degrees angle.

C. N. E.

Sewage Disposal

C. H. E. writes: "*What dimensions are required for the tank and filter for a sewage disposal plant for a country house? The total household, including maids and chauffeur, will consist of twelve persons.*"

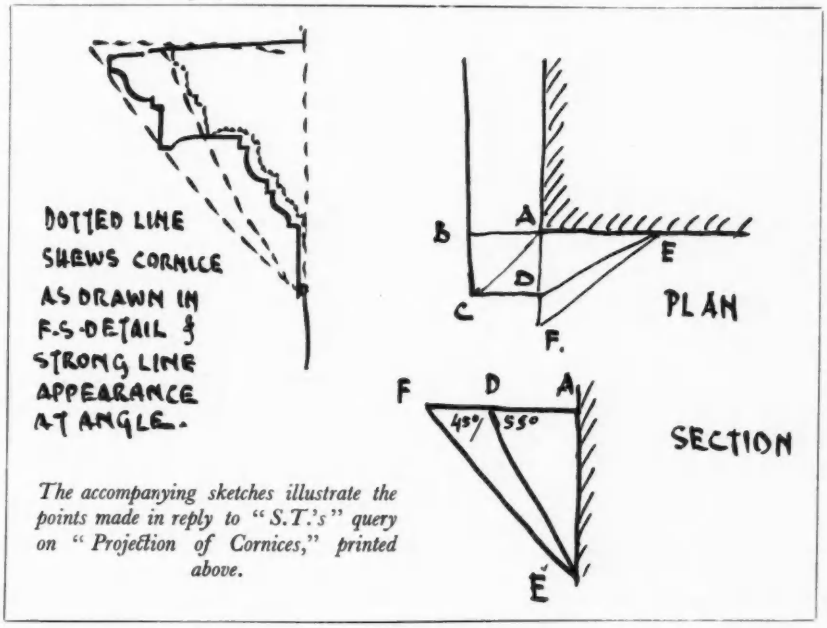
It is usual to calculate the consumption of water in a household at 30 gallons per head per day; this will include all baths, w.c.s, etc., as well as domestic and kitchen use. Therefore, as there will be a filter attached to the tank, the capacity of the latter may be calculated at half the daily flow. $\frac{12\times30}{2}$ galls. $=180$ galls. $\frac{180}{6{\cdot}25}$ = say, 29 cu. ft.

Therefore a tank 6 ft. deep × 3 ft. long × 1 ft. 8 ins. wide is required.

The capacity of the filter should be 1 cub. yd. to 15 persons, but double this is best for so small an installation. Therefore $\frac{12\times2}{15}=1\frac{3}{5}$ yds.

A deep filter is essential, therefore 5 ft. deep × 4 ft. wide × 2 ft. 3 ins. long will meet the case.

W. L.



The accompanying sketches illustrate the points made in reply to "S.T.'s" query on "Projection of Cornices," printed above.

THE SPECIFICATION WRITER

The Group System

BY A. SEYMOUR REEVES

THERE is a good deal of misunderstanding both as to the purpose and application of the group method for specification writing, which was outlined in the report of the Conference on Specifications (*R.I.B.A. Journal*, June 15, 1929). Some persons regard the proposal as being too novel to be pursued; others consider that there is nothing new about it, except that it provides a definite order or system. The latter view is substantially correct, as the prime elements are based on recent practice. It has also been suggested that the method indicated for finishings is impracticable, or that it will involve difficulties which will be insurmountable with large contracts. Those inclined to this view may be assured that it has been in use for years for large contracts with considerable satisfaction to all concerned.

The group system provides the means whereby a specification can be rendered more simple, more lucid, and much more interesting. It is not an arbitrary, cast-iron, standardized system. On the other hand, it offers much opportunity for individual treatment.

If we ask, "Why is trade classification employed?" the first answer is, "Because it has always been so." The second answer is, "Because originally the trades were let separately." Many specification writers have broken away from trade classification and introduced group methods. One reason is that patent materials or patent methods of construction do not fit into the usual trade classification. Another reason is that the dissection of trades causes wide separation of items which are closely allied in the building operations and makes it difficult for the reader to grasp the relationship of the component parts. This applies more particularly to buildings with some complexity in the finishings and fittings.

While opinions may differ as to the need for group classification in specifications for new buildings, there is general agreement as to the advisability of this method when dealing with alterations to existing premises. Not only does the group system facilitate the discovery of desired information, but its use reduces the number of queries during the progress of work.

A clause which states that all walls are to be plastered "except where otherwise described," does not really convey any information. With a fair-sized job, if the specification is based on trade classification, a clause such as that just quoted will cause the reader to search almost every trade in order to discover the "other" descriptions and to understand their relationship.

When trade classification is employed, a good deal of the specification is little more than a restatement of descriptions which appear in the quantities, with indications as to location but nothing as to relationship. The group system, being on a quite different basis, aims at providing this information in such a way as to enable the reader to grasp the architect's intentions in a comprehensive manner. The important thing about the group system is not the observance of particular details but the adoption of the general basis. This basis follows the progress of the building operations and is therefore suitable to almost any kind of building.

The opening section of Preliminaries would be in the usual form, but in the remainder of the document the explanation or description of work is separated from the general clauses. Thus, after the Preliminaries will come a section containing all general clauses under their trade headings, a series of subsections similar to the preambles in bills of quantities. Following this will be the description of work which, instead of being under separate trades, is divided into three main groups: (1) Structural and Carcass Work; (2) Finishings; and (3) Essential Services.

(*To be continued*)

A Glass Firm's Aid to the Architect

MESSRS. CHANCE'S latest collection of samples is a real attempt to meet the needs of the specification writer. Some forty different varieties of glass are contained in a metal case of four trays which, when closed, occupies no more space than a large book. The trays are hinged at the sides to arms, so that, on lifting the top tray, those below are extended and the whole of the samples are exposed to view at once. Those who remember finger nails broken in lifting the old trays, and that other abomination, the black box wherein the samples fitted vertically, with only their edges visible, will appreciate the advantages of this new pattern case.

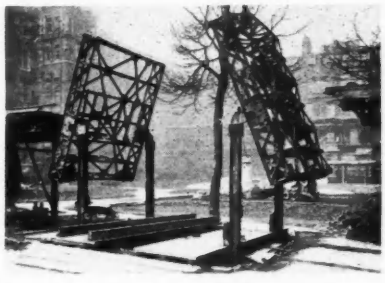
Glass today has a wider sphere of application, and many of these patterns can be put to other uses than the opaque and semi-opaque door and window fillings for which they were primarily designed. "Luminating" glass, with one side raised into ribs six to an inch, and "Reflectalite," with a surface broken up into a number of small cones about twenty-five to the square inch, are new glasses and very suitable for artificial lighting schemes. "Maximum Daylight" has a ribbed and waved effect, with strong vertical or horizontal lines (according to the way it is fixed), combined with great brilliancy, and is one of the most decorative samples. "Stippolyte" and "Dewdrop" are obscured glasses which admit a large amount of daylight; the former has a smooth surface, which makes it easy to keep clean.

These and other already well-known varieties, combined with concealed electric lighting, and manufactured in either white or coloured glass, have endless possibilities in schemes of modern decoration. One or two of the older patterns might be discarded in favour of newer geometrical designs more in keeping with present-day schemes of decoration, and a sample of transparent silvered glass would be a novelty of interest to many architects. The sample of "Calorex" glass is worth noting, for a glass which admits light while excluding seventy-five per cent. of heat has many uses, not only for large skylights and under tropical conditions, but also in the humbler domestic larder, and other rooms requiring protection from actinic rays.

The booklet which accompanies the samples is all that a manufacturer's catalogue should be. Pleasantly designed, and printed, in two colours, in good clear type, it gives, among other concise information, a useful list of glasses with tabulated columns of sizes, thicknesses and percentages of light transmitted. If anything, the book is too condensed, and further expansion of the remarks on modern glass treatment and decorative uses would make it yet more welcome. Architects are more likely to be attracted by a well-printed catalogue of a convenient size than by lists of ungainly shape interleaved with loose pamphlets. Messrs. Chance's brochure will please the most fastidious. LL. E. W.

"IN *buildings today there is much design of a definitely engineering character that is incidental to and complementary of the work of the architect,*" *said Mr. Oswald Healing, in the course of a paper recently read before the Quantity Surveyors.* "*It is becoming more and more the custom for architects to consult engineers in relation to such special structures as deep concrete foundations, retaining walls, piling, structural steelwork, and reinforced concrete.*" *The author goes on to claim that the best results are derived from the collaboration of the architect and the engineer, who, it is his conviction, should be of the independent consultant type. This paper, entitled* "*Quantities for Engineering Works,*" *has now been issued as a reprint from the Journal of the Surveyors' Institution.*





Presented to London Hospital by Sir William Paulin, and designed by Gordon Jeeves, this covered way presented an unusual problem. To provide passage for fire engines and escapes, two bays were made to open, bascule-wise, pivoting upon the supporting columns and operated by electrical drive (in 15 seconds), or, in emergency, by hand gear, both concealed. The photographs show the movable bays in two positions, and the steel skeleton (designed by S. W. Budd, A.M.INST.C.E., consultant engineer for the work) before casing in African teak. The roof is covered with copper.

The Catadyn Method of Sterilizing Water

SOME years ago the influence of certain metals, such as silver and copper, in contact with water was found to have a destructive effect upon bacterial organisms in the water. Since then, a great deal of investigation into the phenomenon, which was given the name of oligodynamics, has been conducted. Recent research work by the Munich physicist, Dr. Georg A. Krause, indicates that such metals as silver, copper, aluminium, etc., in laminated molecular form, accumulate active molecular oxygen in quantities depending on the quality of the surfaces. This oxygen generates metal salts; the metal salts go into solution in the form of ions and kill the bacteria by transmission of the electric charge of the ions.

As the ions represent exceedingly small particles, the weight of silver used is very small, and is in fact practically negligible. The catalytic-dynamic character of this action has given the term " catadyn " method to Krause's process, which employs silver in a special spongy condition as the active metal, silver having the highest bactericidal properties without having any deleterious effects upon the cells of higher organisms such as the human body.

The catadyn silver definitely attacks bacterial organisms and destroys them, while leaving the higher or animal cells unimpaired. It kills off all water-borne disease germs, the time required for the process depending upon the concentration of the bacteria in the water, and the claim is made that bacterial counts such as those observed during epidemics of typhoid fever of recent years in Europe would be definitely destroyed within thirty minutes. In the general application of the process, however, a two hours' contact for the water to ensure sterilization is recommended. The properties of the treated water are not transient, there being apparently a large excess of potential activity retained by the water. The selective action of the process is important, for, while killing the germs and making the water sterile in respect of bacteria, leavens and other micro-organisms are not affected. The treated water undergoes no deleterious change in taste, smell, or appearance, but on the contrary is said to contain more oxygen and to have a fresher taste.

The sterilization of drinking water and water for other personal uses is the obvious first application of the process, and this is simply done by means of special flasks and containers. Catadyn sterilizing flasks are made of glass, clay, or porcelain. They are filled with porcelain rings coated with pure refined silver, prepared by the catadyn method. Infected water poured into such a flask can be withdrawn germ-free after having remained there for two hours. This action of the silver continues until the metal is consumed, but the latter process is so slow that the silver deposit in a sterilizing flask is sufficient to treat more than a million litres of water.



The process has been applied in Germany to drinking-flasks of all sorts; also jugs and portable vessels of any size can be similarly equipped, and even large sterilizing reservoirs can be constructed on the flask principle for the use of buildings or groups of buildings. These reservoirs are provided with elements for insertion, consisting of catadyn balls or rings, and since the treated water retains its sterility it can be stored without any precautionary measures.

The method can also be used in connection with filtering. When a normal filter is equipped with catadyn silver, the filter imprisons the germs while the catadyn destroys them and prevents their growth. For the treatment of water in medium and larger volumes the method employed does not pass the water through a filter, but carries the water in contact with a catadyn body for a given time until sterilization is complete. For treating large volumes of water, such as 20 million gallons per day, Dr. Krause uses silver compounds to be mixed with the water in quantities similar to those employed in the catadyn method.

A report on tests made at the Counties Public Health Laboratories, Queen Victoria Street, London, E.C., in which the effect on the *Bacillus Coli Communis* was tested, indicates that even in abnormally high concentrations a sufficient time of treatment secures complete sterility.

A. H. H.

LITERATURE

THE METROPOLIS OF TOMORROW

OF the many Utopias which have exercised the imagination of men from Plato to Mr. Wells none has ever approached reality; not because they were impossible of realization, but since the mind of man, unstable as litmus paper, sets before it a constantly changing ideal, the Utopia of one age is not the Perfect State of another.

The Metropolis of Tomorrow is another of these dream cities; this time the dreamer is an American architect, and it is built up, in the manner of Utopias, upon a reasoned probability. Mr. Ferriss divides his sixty drawings into three sections, prefacing each with a short essay and giving an explanatory note to every drawing.

The first part of the book illustrates actual buildings of the skyscraper type; the second deals with the development of forms governed by the American Zoning Laws; and the third is devoted to drawings of the dream city which is the logical end of the tendencies foreshadowed in the first two parts.

The future Metropolis is to be a city dominated by immense towers, for the skyscraper, under present restrictions, tends more and more to this form. Mr. Ferriss is alive to the dangerous traffic congestions that these enormous human hives create when they are concentrated in a small area. Today, out of the 377 buildings in the United States over twenty stories high, 188 are within the limit of New York City, and rush-hour conditions are almost intolerable. The illustrations of roadways on different levels are a suggested solution, but the city of the future will not require these.

Mr. Ferriss has learnt from M. Corbusier the value of towers placed at wide intervals and at definite local points, while the intermediate blocks of buildings rise only to moderate heights. To the European it is not an attractive prospect, and one feels that at times Mr. Ferriss himself is a little frightened of the Frankenstein monster he has evoked. One drawing of Night in the Science Zone is a veritable vision of a City of Dreadful Night. But one returns again and again to the fascination of these beautifully reproduced drawings of a master draughtsman.

LL. E. WILLIAMS

The Metropolis of Tomorrow. By Hugh Ferriss. London: B. T. Batsford, Ltd. Price 35s. net.



The Dunmow Chair, or the "prior's chair" as this piece is termed, is actually a fragment of the fittings of an ancient religious establishment founded during the reign of King Henry III.

[*From* Ancient Church Chests and Chairs.]

ANCIENT CHURCH CHESTS AND CHAIRS

THIS valuable and very readable book by the leading authority on the subject has interest not only for the expert, but for the ordinary reader, who is likely to be misled by the inaccurate and often legendary information which gathers round old church furniture. One is left in doubt whether to wonder more at the spoliation and neglect of past ages, or at the number of treasures that actually do remain.

The book is usefully arranged as an itinerary, covering the Home Counties (with one excursion into Norfolk), the places visited being all within reasonable distance of one another and of London. The chests and chairs are fully illustrated and described with expert criticism; they are treated not as cold museum pieces, but shown in their actual surroundings and where possible located by the help of old prints; also other points of interest in the churches containing them are touched upon.

The reader may find himself stripped of a few pleasant delusions such as that of the "Armada chest," but as regards historical objects the solid and reliable truth has often more fascination than has anything that merely borders on fiction. It is especially interesting to note that many of the things described here may actually be seen at the present Exhibition of Mediæval Art at South Kensington Museum, and this book may serve as an excellent supplementary guide to that exhibition.

ELEANOR K. D. HUGHES

Ancient Church Chests and Chairs (in the Home Counties Round Greater London). By Fred Roe, R.I., R.B.C. London: B. T. Batsford, Ltd. Price £1 1s. net.

MODERN PUBLIC BATHS AND WASH-HOUSES

THIS little handbook should prove extremely useful to any architect employed to design a swimming-bath of any kind. It is divided into three main divisions, comprising (1) public baths and wash-houses, (2) swimming-baths for schools, (3) open-air baths. Each main division has several subheadings dealing with layout, materials, filtration, heating, diving fittings, etc.

Small as the book is, I cannot help feeling that a book giving so much data would be handier for reference if an index were added.

The book has been issued under the auspices of the Amateur Swimming Association, and as their recommendations and those of the Amateur Diving Association are embodied in the book, it is of great convenience in legislating for the planning of the bath itself, and the diving-boards, giving all heights, depths, etc., required for competitions of any aquatic nature.

Great stress is laid on the filtration and purification of the water, and the desirability of the compulsory use of more thorough cleansing facilities for the bathers before entering the baths.

I think, in the light of recent events, it would be advisable also to mention the importance of thoroughly disinfecting the bathing garments, but perhaps this is more a matter for the management.

The general advice on layout of swimming-baths of all descriptions is admirable and instructive. It is, of course, easier in the case of schools to ensure that the bathers pass through cleansing-rooms between their dressing-boxes and the bath, but we can heartily endorse the authors' hope that a similar arrangement in public baths will soon be adopted. The idea of having the dressing-boxes round the bath has always been a fetish attended with great disadvantages.

The authors make a passing note on aeration being required to impart sparkle to the water. I think there have been failures due to over-aeration, which has had the opposite effect of making the water flat.

The general advice as to materials is all very helpful, and for so short a book the whole ground is very well covered.

On the subject of inlets and outlets (page 45) I think the scheme outlined in THE ARCHITECTS' JOURNAL of June 11 last should be considered, as it overcomes all the difficulties named and provides better circulation.

H. D.

Modern Public Baths and Wash-houses. By A. W. S. and K. M. B. Cross. London: Published by the Amateur Swimming Association. Price 2s. 6d. net.

TREES AND SHRUBS FOR ROADSIDES

IN *Roadside Planting* is a fairly complete list of trees and shrubs, under their botanical names, but with an index giving national names also. Subsections indicate those suitable for suburban, smoky or windy districts and those for producing special effects, and those best adapted to several kinds of soils. This is all excellently done, and one can find few faults; for the book has been read in manuscript by eminent authorities. A word should be added to the note on the aspen poplar, that it frequently blows over in a high wind; and on page 29, line 11, a negative is omitted. The book, however, omits to say which trees and bushes attract birds by their berries and their facilities for nesting; birds, being noisy themselves, generally are fond of railway embankments and main roads, and are quite ready to beautify them with songs, as witness the many pairs of nightingales which have nested between road and railway on the narrow bank from Salisbury to Wilton. The authors likewise should mention that tree-planting needs design, and not a haphazard choice of specimens from a horticulturist's catalogue, made by district councillors of uncertain taste.

P. M. STRATTON

Roadside Planting. By "R.B.A." (Roads Beautifying Association). London: Country Life, Ltd. Price 7s. 6d.

SOCIETIES AND INSTITUTIONS

R.I.B.A. ELECTION OF MEMBERS

At a general meeting of the R.I.B.A. the following members were elected :

As Fellows (15).	*As Associates* (14).
Benjamin, A. F.	Bennett, W. G.
Bragg, H.	Beveridge, G. R.
Bucknell, L. H.	Cowin, J. N.
Cantell, M. T.	Duncan, D. R.
Challen, H. B.	Hillier, N. B.
Clark, C. W.	Kelham, H. W.
Clarke, J. A.	McIntosh, W. G.
Clifton, E. N.	Macleod, A. N.
Dowton, W. L.	Orfeur, R. F.
Greenen, W. A.	Ritchie, J. A.
Jackson, G. W.	Robinson, A. P.
Lawrence, H. M.	Tough, A.
Robertson, R.	Wakelin, R. N.
Sutherland, T. S.	Wall M. L. J. (Miss).
Walkley, A. H.	

THE PRESERVATION OF RURAL ENGLAND

The Gloucestershire branch of the Council for the Preservation of Rural England recently held a conference at Cheltenham, under the chairmanship of Sir Fabian Ware, K.B.E., K.C.V.O.

The chairman, in response to a welcome given to the conference by the Mayor of Cheltenham, said that the C.P.R.E. had been fighting a desperate but not unsuccessful battle, and they had received much encouragement, in particular from the results of their educational work.

Regional and Town Planning

Captain J. H. Trye, R.N., then read a paper on "Regional and Town Planning." Regional planning committees, he said, had no statutory powers and were simply advisory; they were intended to take a broad, comprehensive view of the whole district, draw attention to natural beauties which ought to be preserved for the general good, indicate the districts best suited for particular uses, having regard to their

Beech avenue, showing a Gothic effect of stems and branches.



[*From* Roadside Planting]

natural resources, the best through lines of communication between one district and another, suggest provision for open spaces and all such similar matters. These regional committees did not profess to go into details; they pointed out the lines on which, by general consent, development should proceed. It was then for the individual authorities to take the matter up in their own districts and work out the details for their own areas. Any rural or urban district council could become a town-planning authority. For their own benefit local authorities should formulate town-planning schemes of their own, because until that was done they had no control over the development of their districts. Captain Trye then described the process of forming a regional planning scheme, and pointed out that when the final scheme was prepared it had to be approved by the Ministry, and when that was done it became illegal to contravene it.

A discussion on regional town planning was then opened by Mr. G. L. Pepler, who remarked that the great value of the regional planning movement and of the work of the C.P.R.E. was that it was inducing the local authorities to exercise their powers, to study their districts and regions, and to determine what form the planning should take.

Traditional Buildings of the Cotswolds

Mr. H. Stratton Davies, F.R.I.B.A., in reading a paper on "Traditional Buildings of the Cotswolds," said it would seem that there existed towards the end of the sixteenth century in the Cotswolds all the essential conditions necessary for the favourable development of a virile and worthy style of building. The people were prosperous, owing to the English and Continental demand for the famous Cotswold wool, the great fifteenth-century tradition of church building lingered in the blood of the masons, and the local materials were beautiful and lasting. Transport was difficult; consequently, there was no temptation to indulge in materials foreign to the locality, and the builders were thrown on their own resources.

There was one indefinable factor which the lecturer called good manners in building. The Cotswold builder was a perfect gentleman in his craft; he always seemed to do the right thing in a simple, unaffected way; he never strained after effect and had a very proper sense of proportion and the fitness of things.

It would be difficult to think of any buildings that so harmoniously engage with their surroundings and so closely belong to the soil on which they were built, and he emphasized the importance of building whenever possible with local material. The soft multi-tinted bricks and tiles of the clay districts were as fitting there as was the stone on the hills.

Modern Buildings and New Materials

An address on "Modern Building and the Use of New Materials" was given by Mr. Thomas Falconer, F.R.I.B.A. He remarked that the destruction of rural amenities was chiefly due to the erection of new buildings of new materials built in ill-considered relation to their surroundings. What their movement lacked so far as new building and the use of new materials were concerned was a constructive policy.

The C.P.R.E. was not a popular body with all classes—by some they had been threatened with the poleaxe, and by others they were thought to be a body of antiquarian reactionaries who were anxious to preserve the countryside as a "museum piece," and to prevent in the Cotswold country any building which was not a copy of one of their sixteenth- or seventeenth-century types.

Perhaps, Mr. Falconer said, nowhere was there building more perfect in its simplicity and grace than that found in Cotswold houses; with those as examples to inspire the right use of good materials, by their just appreciation of proportion, by their carefully thought-out construction, and by their sparing but always effective use of good ornament, it should be easier to build well to-day.

ANNUAL MEETING OF THE A.A.S.T.A.

The annual meeting of the Association of Architects, Surveyors and Technical Assistants was held at the R.I.B.A. The president, Mr. W. H. Hamlyn, A.R.I.B.A., occupied the chair.

The President in his address alluded to the Association's persistent efforts to obtain some authoritative basis for salaries. As the official representative of the A.A.S.T.A. on the Council of the R.I.B.A., he said that the Council had authorized a scale of salaries with application to the staffs employed by public authorities, industrial corporations, etc. This scale, which was a basis and was not arbitrary, ranged from £150 per annum to £2,500 per annum, and the years of experience and the duties and responsibilities involved were to be taken into account in each case.

The annual report and balance-sheet were unanimously adopted.

The annual dinner of the Association took place at the Florence Restaurant, Rupert Street, W., on the same evening. The toast of the A.A.S.T.A. was proposed by Mr. W. T. Curtis, F.R.I.B.A., and replied to by Mr. W. H. Hamlyn. The dinner was followed by a concert and dance.

EXHIBITION OF SCHOOL BUILDINGS

An exhibition of drawings and photographs of the work of the architect's department of the Kent County Council was held in Mote Park, Maidstone, on June 21.

Among the exhibits were eighth-scale rendered drawings of the new standard Central Schools (north and south aspect types). These schools have been planned on "open-air" lines and are heated by low-pressure hot-water systems with oil fuel firing, whilst some are heated by electricity.

The county architect is Major W. H. Robinson, F.R.I.B.A., and the exhibition was arranged by Mr. S. H. Loweth, A.R.I.B.A., deputy county architect.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE.]

PARLIAMENT reassembled, after the Whitsun Recess, on Tuesday, June 17.

Steel Frames in Buildings

Mr. A. M. Samuel asked the Minister of Health whether his department laid down any regulations as to loads to which steel frames in buildings might be subjected; whether he was aware that steel frames were allowed by some local authorities to carry loads or stresses which were prohibited by other local authorities, although steel frames of the same quality, strength and design were used in both cases; and whether he would recommend local authorities to adopt uniform regulations applicable to identical conditions.

Mr. Greenwood said the position outside London was that the use of steel framing in almost all the large urban centres was subject only to a bylaw requiring due stability and proper construction. The actual practice of local authorities was now under investigation by the Department of Scientific and Industrial Research in a number of areas. In the light of that investigation he proposed to consider the possibility of suggesting to local authorities some working guide in deciding what was necessary to secure due stability.

Design of Steel Structures

Mr. Samuel then asked the Minister of Health whether he would arrange for the Steel Frame Act of 1909 to be examined by scientific authorities for the purpose of revising its provisions rendered obsolete by the improvements in steel-making since 1909, so as to correct building regulations under the Act which were now so out of date that local authorities frequently waived them.

Mr. Greenwood said that the Building Research Department had set up a committee to review, among other things, present methods and regulations for the design of steel structures.

The Act of 1909 was a London County Council Act applying only to London, and it rested with the County Council to propose to Parliament any measure for bringing it up to date. The County Council had express power in that Act and the Act of 1923 to waive its requirements in so far as they related to iron and steel construction. He was communicating with the County Council on the subject.

Building Regulations and Reinforced Concrete

Yet a further question was put by Mr. Samuel, who inquired of the Minister whether he would revise the 1915 regulations governing the use of reinforced concrete so that they might be applicable to the increased strength of cement developed in the last fifteen years; and, if not, whether he had any information about the action which local authorities were taking to bring their building regulations up to date in relation to the use of reinforced concrete.

Mr. Greenwood replied that the regulations of 1915 were regulations made by the London County Council, and it rested with them to propose their revision. The County Council obtained power in an Act of 1923 to waive any of the requirements in the regulations, and he was in communication with them on the subject. Outside London the use of reinforced concrete was nominally controlled by bylaws, which had almost everywhere been brought up to date. As a rule, they contained only a simple requirement that a wall built of reinforced concrete should be of sufficient thickness to secure due stability.

Decay of Historical Monuments in Ceylon

Mr. Ormsby-Gore asked the Under-Secretary for the Colonies whether he was aware that there was a vacancy for the headship of the Archæological Department in Ceylon; whether it was intended to secure for this post someone experienced in the preservation and scientific restoration of ancient buildings; whether his attention had been called to the neglect into which some of the most important historical monuments in Ceylon had fallen during recent years; and whether he would make representations to the Government of Ceylon to the effect that more energetic measures were required to arrest further decay.

Dr. Shiels said that there was a vacancy in the post of Archæological Commissioner in Ceylon, and steps were being taken to secure for the appointment a suitably qualified candidate. The Ceylon Government would be asked for a report on the condition of the ancient monuments in Ceylon.

THE ARCHITECTS' DIARY

WEDNESDAY, JUNE 25

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. International Exhibition of Modern Commercial Architecture. Until June 30.

ROYAL ACADEMY, Burlington House, S.W. Summer Exhibition open to the public. Open until August. **10 a.m.**

ROYAL SANITARY INSTITUTE. Annual Congress to be held at Margate, until June 28. Meetings of the Architectural and Engineering Sections. **10 a.m.**

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At Eastbourne. Summer Meeting. Assemble at Grand Hotel for Group Photograph, 9.15 a.m. Circular Motor Drive, 10 a.m. **9.15 a.m.**

VICTORIA AND ALBERT MUSEUM, South Kensington, S.W.7. Exhibition of English Mediæval Art, held in the North Court. 10 a.m. to 6 p.m. (Thursdays, 10 a.m. to 10 p.m.) **10 a.m.**

SIR JOHN SOANE'S MUSEUM, 13 Lincoln's Inn Fields, W.C.2. Open every Tuesday, Wednesday, Thursday and Friday until September next. 10 a.m. till 5 p.m. **10 a.m.**

KING'S COLLEGE, Strand, W.C.2. College Term ends.

FRIDAY, JUNE 27

LONDON SOCIETY, Lancaster House, St. James's S.W.1. Visits to Deaf and Dumb Asylum, 179 Clapton Road, Hackney, and St. John's Institute, Hackney. Meet at the first-named place at 2.45 p.m. Tea will be provided at St. John's Institute. **2.45 p.m.**

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL SOCIETY, The Castle, Winchester. Excursion to the Joinery Works of Messrs. W. E. Chivers and Sons, Ltd., Devizes, and buildings of architectural interest in the neighbourhood. A General Meeting will be held after lunch.

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. Meet at the Streatham Baths of the Wandsworth Borough Council for various visits of inspection (including Heston Air Park) at 10.45 a.m. Addresses will be given on "The General Layout of a Modern Air Port," by Major R. H. Mays, and "Communication Requirements," by Captain D. Sinclair. **10.45 a.m.**

KINGSTON PUBLIC BATHS COMPETITION. At the Tiffin Boys' School, Kingston-upon-Thames. Exhibition of designs submitted. Until July 23rd 2.0 p.m. to 8.0 p.m. daily. (Sundays excepted.) **2.0 p.m.**

SATURDAY, JUNE 28

Sunrise, 4.45 a.m. Sunset, 9.21 p.m.

MONDAY, JUNE 30

ROME SCHOLARSHIP COMPETITION. At the R.I.B.A., 9 Conduit Street, W.1. Exhibition of designs submitted in the final competition. Until July 5. 10 a.m. to 7 p.m. (Saturday 10 a.m. to 2 p.m.) **10 a.m.**

INSTITUTION OF MECHANICAL ENGINEERS. At the Henry Herbert Wills Physics Laboratory, University of Bristol. Summer Meeting. Until July 4.

TUESDAY, JULY 1

INSTITUTE OF QUARRYING. At the Grand Hotel, Scarborough. Annual Conference. Until July 5.

WEDNESDAY, JULY 2

HAMPSHIRE AND ISLE OF WIGHT ARCHITECTURAL ASSOCIATION. Annual Exhibition to be held at Portsmouth until July 8.

THURSDAY, JULY 3

ASSOCIATION OF MANAGERS OF SEWAGE DISPOSAL WORKS. Annual Summer Conference at the Town Hall, Sheffield. Papers will be read on "Small Bio-aeration Plants," by Dr. H. Kessener, Director, Government Institute for Purification of Waste Waters, The Hague; and "Biological Notes on Sewage Disposal Processes," by Mr. Harold Taylor, Chief Technical Assistant, Sewage Disposal Works, Sheffield.

UNIVERSITY OF LONDON, University College Gower Street, W.C.1. Assembly of Faculties: Session ends.

FRIDAY, JULY

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Joint Meeting with the Hampshire and Isle of Wight Architectural Association. Visits to the new Town Hall (description by E. Berry, Webber), the Old Bargate (description by H. P. Cart de Lafontaine), Guildhall, Empire Theatre, and Ocean Liners. Particulars are obtainable from the Hon. Secretary.

VICTORIA AND ALBERT MUSEUM, Cromwell Road, South Kensington, S.W.7. "Evolution of the Chair." By T. F. Wilson, F.R.S.A.I. **12 noon**

SATURDAY, JULY 5

Sunrise, 4.49 a.m. Sunset, 9.19 p.m.

R.I.B.A., 9 Conduit Street, W.1. Tour to United States and Canada by the Cunard Liner "Samaria." Returning on July 25. Members wishing to take part in the trip should apply to H. T. Leese, 26-27 Cockspur Street, London, S.W.1.

WORTHING MUNICIPAL BATHS COMPETITION. Latest date for submission of designs.

SUNDAY, JULY 6

SOUTH-EASTERN SOCIETY OF ARCHITECTS. At Southampton. Excursion to Romsey and the New Forest.

MONDAY, JULY 7

UNIVERSITY OF LONDON, University College, Gower Street, W.C.1. Exhibition of Egyptian and Palestinian Antiquities. Until July 26. 10 a.m. to 5 p.m. (July 15 and 25, 6.30 to 8 p.m.) **10 a.m.**

WEDNESDAY, JULY 9

INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS. At Scarborough. Annual Meeting and Conference. Until July 12.

VICTORIA AND ALBERT MUSEUM, Cromwell Road South Kensington, S.W.7. "Architecture (1)." By L. O. Faraker. **3 p.m.**

THURSDAY, JULY 10

VICTORIA AND ALBERT MUSEUM, Cromwell Road, South Kensington, S.W.7. "Architecture (2)." By L. O. Faraker. **12 noon**

FRIDAY, JULY 11

LONDON SOCIETY, Lancaster House, St. James's, S.W.1. Annual River Trip. Visit to the West India Docks. The party will leave Westminster Pier at 2 p.m. Tickets 8s. 6d. (including tea). **2 p.m.**

SATURDAY, JULY 12

Sunrise, 4.56 a.m. Sunset, 9.14 p.m.

MONDAY, JULY 14

VICTORIA AND ALBERT MUSEUM, Cromwell Road, South Kensington, S.W.7. "Ironwork." By L. O. Faraker. **3 p.m.**

WEDNESDAY, JULY 16

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Annual Excursion to Denmark and Sweden, returning to London on July 29. Particulars of the tour, etc., are obtainable from F. R. Yerbury, Secretary, Architectural Association.

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Liége. July 16–17.

FRIDAY, JULY 18

BRITISH STEELWORK ASSOCIATION. At the Institution of Mechanical Engineers, Storey's Gate, S.W.1. 'Skyscrapers in America." By G. E. J. Pistor. 5.30 p.m. (Tea will be served at 4.45 p.m.) **5.30 p.m.**

INTERNATIONAL CONFERENCE of Union Internationale des Villes and Pouvoirs Locaux. At Antwerp. July 18–19.

SATURDAY, JULY 19

Sunrise, 5.4 a.m. Sunset, 9.8 p.m.

VICTORIA AND ALBERT MUSEUM, Cromwell Road, South Kensington, S.W.7. Indian Section: "Architecture." By Miss M. Chamot. **3 p.m.**

MONDAY, JULY 21

VICTORIA AND ALBERT MUSEUM, Cromwell Road, South Kensington, S.W.7. "Early English Furniture." 12 noon. "English Seventeenth Century Furniture." 3 p.m. Both lectures by L. O. Faraker. **12 noon**

THURSDAY, JULY 24

VICTORIA AND ALBERT MUSEUM, Cromwell Road, South Kensington, S.W.7. "French Eighteenth-Century Furniture." By L. O. Faraker. **12 noon**

"Italian Furniture." By Miss M. Chamot. **7 p.m.**

FRIDAY, JULY 25

R.I.B.A., 9 Conduit Street, W.1. Visit to U.S.A. Arrival of S.S. "Ascania" at Plymouth.

SATURDAY, JULY 26

Sunrise, 5.13 a.m. Sunset, 8.59 p.m.

SOUTH-EASTERN SOCIETY OF ARCHITECTS. Visits to Leeds Castle, Chilham or Bodiam, etc., organized by the Canterbury and Tunbridge Wells Chapters. Particulars of the visits are obtainable from the Hon. Secretaries of the Chapters.

MONDAY, JULY 28

VICTORIA AND ALBERT MUSEUM, Cromwell Road, South Kensington, S.W.7. "Italian Decoration." By Miss M. Chamot. **3 p.m.**

THURSDAY, JULY 31

VICTORIA AND ALBERT MUSEUM, Cromwell Road, South Kensington, S.W.7. "Alfred Stevens." By Miss M. Chamot. **3 p.m.**

LUTON TOWN HALL COMPETITION. Latest date for submission of designs.

DUDLEY SCHOOL COMPETITION. Latest date for submission of designs.

LAW REPORT

DAMAGES FOR REMOVAL OF BUILDINGS

Smyth v. *Luck Bros., Ltd. Chancery Division. Before Mr. Justice Farwell*

THIS was an action by Capt. Geo. Robertson Watson Smyth, of Wadhurst Castle, Wadhurst, Sussex, against Luck Bros., Ltd., of Wadhurst, for a declaration that all buildings, trade and other fixtures on or in the premises comprised in a lease of June 17, 1907, made between plaintiff's father and the defendants were the property of the plaintiff.

Defendants contended that they were entitled to remove the fixtures.

Mr. Lavington appeared for the plaintiff, and Mr. Elliott Batt for the defendants.

Mr. Lavington, in opening the case, said the action was by a landlord, and in the events that had happened the plaintiff claimed damages for alleged wrongful removal of certain buildings, etc., on his land. The action, as originally started, also claimed an injunction, but that was no longer material, as the buildings had been removed before a motion came before a judge dealing with the matter. The lease was made between plaintiff's father and the defendants, and the rent was £25 a year, but it was never paid in cash, as defendants did repairs on the plaintiff's estate and that was set off against the rent. The lease was for 21 years from June, 1907, and terminated in June, 1928. It contained a clause that upon the expiration of the tenancy, or at any time during the tenancy, the defendants having paid the rent, might at their option either remove or take away the buildings which they had erected. The present defendants and their predecessors had been in possession of the land for many years under the same landlord. The defendants, however, at the end of the lease, did nothing, and instead of giving up possession, held over. On July 20, plaintiff wrote the defendants a letter asking for possession, as he intended to sell. Defendants did nothing till August. The plaintiff then instructed his solicitors, and in reply to their letter the defendants denied that they were trespassers and inquired the price of the property. The parties failed to come to terms. The buildings were erected by the defendants, and consisted of a carpenter's shop, 40 ft. by 20 ft., a machine shop, 50 ft. by 25 ft., and an engine room, 18 ft. by 10 ft. These buildings were all of considerable value, and they had now been removed. In 1918 there were some negotiations between the plaintiff and the defendants as to the purchase of the property. Plaintiff put the value of the buildings at £275, and afterwards the price was raised to £300.

Mr. Batt said he agreed that the contents of the buildings were the tenants', and that the buildings belonged to the landlord.

Capt. Smyth gave evidence in support of his case. He said he was not inclined to buy the buildings, but was willing to sell, and thought he would put the place up for sale by auction.

Cross-examined: Defendants had been in possession of the land for some 60 years, he believed. Everything that was on the land was put there by the defendants. He wanted the defendants to carry out the terms of the lease.

For the defence, Mr. Charles H. Luck, of Little Farm, Wadhurst, was called. His father and grandfather had carried on the same business, and this plot of land had been occupied by them since 1850. The buildings were erected by them. In 1926 he made an offer for the land and other land of £1,000, which he increased to £1,200 in 1927. He had seen Capt. Smyth at the expiration of the lease, and he said there would have to be some rearrangement as to the rent, and witness said he expected that. He was not aware that on the expiration of the lease he had to give notice. He expected to hear from Capt. Smyth on the matter. Witness thought that if Capt. Smyth wanted terms, he (witness) would have received some intimation from him. When witness found they could not come to terms, they started on September 10 to remove the fixtures, etc., and finished by September 19.

His lordship, in giving judgment, said the lease gave the tenant the option to take away the buildings or the landlord the option of purchasing. He could not say that there was anything here to justify the defendants remaining in possession. The plaintiff's solicitors wrote defendants a letter that they were trespassers and offering certain terms. As defendants ought to have given up possession on June 24, or within a reasonable period, the solicitors' letter was a very unnecessarily hostile method of dealing with the matter. There was extraordinary delay in prosecuting this action that he did not understand. Defendants had removed these buildings, and they were not, in his opinion, justified in doing so, as they had not adhered to the privilege given them under the lease. Defendants were not justified in going on in possession till September 19. Defendants had removed property, which in fact was the plaintiff's property, and the plaintiff was entitled to damages in that respect. On the claim the plaintiff was entitled to a declaration that the three buildings on the land at the expiration of the lease were the plaintiff's property, and that the plaintiff was entitled to damages for conversion, there must be an inquiry as to the damages, and the costs of that inquiry would be reserved. It might be that the defendants would either pay into Court or make an offer of a sum as to damages, which would make unnecessary the expense of an inquiry. Judgment for defendants on the counter-claim for £2 17s. No order as to costs, having regard to the facts of the case.

COMPETITIONS OPEN

July 1.—The Royal National Eisteddfod of Wales, 1930, has issued a list of competitions in the arts, crafts and science section. Assessor: Percy E. Thomas, F.R.I.B.A. The drawings are to be delivered to W. H. Protheroe, General Secretary, Eisteddfod Office, Llanelly, not earlier than July 1, 1930, or later than July 5, 1930. Besides the architectural section there are also competitions for fine art, sculpture, applied art, and domestic arts and crafts. Programme giving full particulars, etc., is obtainable from James Davies & Co., Ltd., Murray Street, Llanelly. Price 1s. (post free, 1s. 3d.)

July 5.—The Worthing Corporation invites competitive designs for the erection of municipal buildings, etc., proposed to be erected in Chapel Road, Worthing. Assessor: H. V. Ashley, F.R.I.B.A. Premiums: £300, £250, £150 and £50. Application for particulars of the competition, etc., should be made to J. Kennedy Allerton, Town Clerk, Worthing. Deposit £1 1s. Latest date for submission of designs: July 5.

July 15.—The Isle of Man Education Authority invites architects to submit competitive designs for a new Grammar School at Ramsey, Isle of Man. Assessor, T. Taliesin Rees, F.R.I.B.A. Premiums: £250, £150 and £75. Particulars, etc., are obtainable from T. R. Lewin, Clerk of the Authority, Education Office, Strand Street, Douglas, until July 1. Deposit £1 1s. Latest date for submission of designs: September 30.

July 31.—The Luton Town Council invites architects to submit designs for the proposed town hall, which is to be built on the site of the old town hall at an approximate cost of £250,000. Assessor: Sir Brumwell Thomas, F.R.I.B.A. Premiums: £500, £300, £200 and £100. Particulars may be obtained on application to W. Smith, Town Clerk, 2 Upper George Street, Luton. Deposit £2 2s. Latest date for submission of designs: July 31.

July 31.—The Dudley Education Authority invites architects having an office within a radius of fifteen miles of Dudley to submit competitive designs for a Council school to accommodate 320 children, to be erected on the Brewery Fields estate; also a school for 400 children on the Priory estate. Assessor: Herbert T. Buckland, F.R.I.B.A. Premiums: £150, £100, and £50. Applications for conditions of the competition, etc., should have been made to J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley, by April 30. Deposit £1 1s. Latest date for submission of designs: July 31.

September 1.—The Bangor (Co. Down) Borough Council invites architects or town planners to submit designs in competition for laying out the sea front within the Borough. Assessor: Professor Patrick Abercrombie, F.R.I.B.A. Premiums: £150 and £50 for first and second places, respectively. Copies

of the conditions and plans will be forwarded on application to J. Milliken, Town Clerk, Borough Council Offices, Bangor, Co. Down. Deposit £1 1s. Latest date for submission of designs : September 1.

No date.—The Carlisle Corporation invites British architects to submit designs for the façade to English Street and the Victoria Viaduct, suitable for shops and business premises. The site was previously occupied by the Prison. The total length of the frontage is approximately 358 ft. Assessor : Francis Jones, F.R.I.B.A. Premiums : £300, £200, and £100. Particulars of the competition, etc., may be obtained from Percy Dalton, A.M.INST.C.E., A.R.I.B.A., City Engineer, 18 Fisher Street, Carlisle. Deposit, £1 1s.

No date.—The General Syndicate, Ltd., invites architects to submit competitive schemes for the development of a site at Liverpool, fronting St. John's Lane, Queen Square and Rose Street. Premiums : £250, £100 and £50, for first, second and third prizes, respectively. Particulars, etc., are obtainable on application to the Secretary, the General Building Syndicate, Ltd., 36 St. Martin's Lane, W.C.2.

Mr. E. A. Jackson, L.R.I.B.A., of North Street, Ashford, has had accepted his designs for a new maternity and child-welfare centre to be built at Bermondsey for the South London Mission. The building, which, it is stated, will cost £17,000, will be the largest voluntary clinic in England, and the Queen is to be asked to perform the opening ceremony.

NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office. All enquiries concerning inventions, patents and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.1. For copies of the full specifications here enumerated, readers should apply to the Patent Office, 25 Southampton Buildings, London, W.C.2. The price is 1s. each.]

LATEST PATENT APPLICATIONS

16969. Pennington, A. M. Hollow reinforced-concrete beams. June 2.

SPECIFICATION PUBLISHED

330035. Bemis Industries, Inc., and Bemis, A. F. Building construction.

THE BUILDINGS ILLUSTRATED

Following are the names of the general contractors and some of the sub-contractors for the buildings illustrated in this issue :—

Bandstand, Terracing, Tea and Shelter Pavilions and Cliff Lift, St. Lawrence Cliffs, Ramsgate (pages 964–968). General contractor, W. W. Martin. Sub-contractors: Excel Asphalte Co., Ltd., asphalt; British Reinforced Concrete Engineering Co., reinforced concrete; Roberts, Adlard & Co., tiles; George Jennings, Ltd., and Alfred Olley, Ltd., sanitary fittings; Alfred Olley, Ltd., door furniture, cloakroom fittings and supply of sanitary fittings; Williams and Williams, casements and window furniture; Xelite Plaster Co., Ltd., external plaster; Evans' Lifts, Ltd., lifts.

Bowls and Tennis Pavilions. General contractors, J. B. Sharman, Ltd. Sub-contractors : Xelite Plaster Co., Ltd., external plaster; Sharman, Ltd., internal plaster ; Ramsgate Gas Co., gas fittings ; Crittall Manufacturing Co., Ltd., steel casements ; Adamsez, Ltd., sanitary fittings ; Educational Supply Association, Ltd., cloakroom fittings.

Jews' Shelter, 63 Mansell Street, Aldgate, E.1 (pages 974–975). General contractors, Bovis, Ltd. Sub-contractors : Ragusa Asphalte Paving Co., Ltd., dampcourses and asphalt roof, etc.; J. J. Barnes, Ltd., stone and construction; Patent Impervious Stone and Construction Co., Ltd., artificial stone and stairtreads; T. C. Jones & Co., Ltd., structural steel ; Caxton Floors, Ltd., fireproof construction ; Ewarts and Son, Ltd., copper dormers ; W. Heywood & Co., patenglazing; J. F. Ebner, wood-block flooring; Art Pavements and Decorations, Ltd., terrazzo floors; Stuart's Granolithic Co., Ltd., granolithic flooring; J. Nicholson & Co., Ltd., central heating; Manlox, Alliott & Co., Ltd., disinfecting plant; Tyler and Freeman, electric wiring; Shanks & Co., Ltd., and Wilmer and Sons, Ltd., sanitary fittings; Wilmer and Sons, Ltd., iron staircases; Yannedis & Co., ironmongery; Crittall Manufacturing Co., Ltd., casements; Albany Forge, Wainwright and Waring, Ltd., metalwork; Art Pavements and Decorations, Ltd., and Brookes & Co., tiling; Penrose Lifts, Ltd., lifts.

TRADE NOTE

Messrs. Holophane, Ltd., after the keenest and almost world-wide competition, have secured the contract for the street lighting at Sao Paulo. About 16,000 street lighting units will be used. Other important street lighting installations secured by Holophane in South America include Buenos Ayres—reputed to be the largest in the world—where more than 30,000 units are installed, and Santiago, Chile, which is considered a very wonderful installation and where over 11,000 units are installed. A copy of the firm's latest street lighting brochure (just published) will be sent to any responsible person interested in street lighting. Application should be addressed to Messrs. Holophane, Ltd., Elverton Street, Vincent Square, London, S.W.1.



New staff restaurant kitchen arrangements have just been installed at Harrods, Brompton Road, by Messrs. Benham and Sons, Ltd. The cafeteria, a view of which is shown, has a counter 157 ft. long. The installation is one of the largest in the world, and enables from 3,000 to 4,000 persons to be catered for per day. The apparatus, including the sinks and tables, is constructed of stainless steel ; the bodies of all cooking apparatus are finished in mottled enamel, and the brass and gunmetal fittings are chromium-plated.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A_1	ABERDARE	S. Wales & M.	1 6½	1 2
A_1	Abergavenny	S. Wales & M.	1 6½	1 1½
B	Abingdon ..	S. Counties	1 5	1 0½
A_2	Accrington	N.W. Counties	1 7	1 2½
A_2	Addlestone	S. Counties	1 5½	1 1
A	Adlington	N.W. Counties	1 7	1 2½
A	Airdrie ..	Scotland	•1 7	1 2½
C	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7	1 2½
B_2	Appleby ..	N.W. Counties	1 3½	11½
A	Ashton-under-Lyne	N.W. Counties	1 7	1 2½
A_2	Atherstone	Mid. Counties	1 5½	1 1
B_2	Aylesbury ..	S. Counties	1 3½	11½
B	BANBURY	S. Counties	1 4	1 0
B	Bangor ..	N.W. Counties	1 4½	1 0½
A	Barnard Castle	N.E. Coast	1 6½	1 1½
A	Barnsley ..	Yorkshire	1 7	1 2½
B_2	Barnstaple	S.W. Counties	1 4	1 0
A	Barrow ..	N.W. Counties	1 7	1 2½
A	Barry ..	S. Wales & M.	1 7	1 2½
B_2	Basingstoke	S.W. Counties	1 4	1 0
A_2	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7	1 2½
A_2	Bedford ..	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 6	1 1½
A_2	Bewdley ..	Mid. Counties	1 6	1 1½
B_2	Bicester ..	Mid. Counties	1 3½	11½
A	Birkenhead	N.W. Counties	•1 8½	1 3½
A	Birmingham	Mid. Counties	1 7	1 2½
A_1	Bishop Auckland	N.E. Coast	1 6½	1 1½
A	Blackburn	N.W. Counties	1 7	1 2½
A	Blackpool	N.W. Counties	1 7	1 2½
A	Blyth ..	N.E. Coast	1 7	1 2½
B_2	Bognor	S. Counties	1 3½	11½
A	Bolton ..	N.W. Counties	1 7	1 2½
A_2	Boston ..	Mid. Counties	1 5½	1 1
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 4	1 0
A	Bradford ..	Yorkshire	1 7	1 2½
A_2	Brentwood	E. Counties	1 6	1 1½
A	Bridgend ..	S. Wales & M.	1 7	1 2½
B_2	Bridgwater	S.W. Counties	1 4	1 0
A_1	Bridlington	Yorkshire	1 6½	1 1½
A	Brighouse ..	Yorkshire	1 7	1 2½
A_2	Brighton ..	S. Counties	1 5½	1 1½
A	Bristol ..	S.W. Counties	1 7	1 2½
B_2	Brixham ..	S.W. Counties	1 3½	11½
A_2	Bromsgrove	Mid. Counties	1 6	1 1½
C	Bromyard ..	Mid. Counties	1 3	11½
A	Burnley ..	N.W. Counties	1 7	1 2½
A	Burslem ..	Mid. Counties	1 7	1 2½
A	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W. Counties	1 7	1 2½
A_1	Buxton ..	N.W. Counties	1 6½	1 1½
A_2	CAMBRIDGE	E. Counties	1 5½	1 1
B_2	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7	1 2½
A	Carlisle ..	N.W. Counties	1 7	1 2½
B	Carmarthen	S. Wales & M.	1 5	1 0½
B_1	Carnarvon	N.W. Counties	1 4½	1 0½
A	Carnforth ..	N.W. Counties	1 7	1 2½
A	Castleford	Yorkshire	1 7	1 2½
B^1	Chatham ..	S. Counties	1 4½	1 0½
B^1	Chelmsford	E. Counties	1 4½	1 0½
A_2	Cheltenham	S.W. Counties	1 5½	1 1
A	Chester ..	N.W. Counties	1 7	1 2½
A	Chesterfield	Mid. Counties	1 7	1 2½
B_2	Chichester ..	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7	1 2½
B_2	Cirencester	S. Counties	1 4	1 0
A	Clitheroe ..	N.W. Counties	1 7	1 2½
A	Clydebank	Scotland	1 7	1 2½
A	Coalville ..	Mid. Counties	1 7	1 2½
A_2	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 7	1 2½
A_2	Colwyn Bay	N.W. Counties	1 5½	1 1
A_1	Consett ..	N.E. Coast	1 6½	1 1½
A_2	Conway ..	N.W. Counties	1 5½	1 1
A	Coventry ..	Mid. Counties	1 7	1 2½
A_2	Crewe ..	N.W. Counties	1 6	1 1½
A_2	Cumberland	N.W. Counties	1 5½	1 1
A	DARLINGTON	N.E. Coast	1 7	1 2½
A	Darwen ..	N.W. Counties	1 7	1 2½
B_2	Deal ..	S. Counties	1 4	1 0
A_2	Denbigh ..	N.W. Counties	1 5½	1 1
A	Derby ..	Mid. Counties	1 7	1 2½
A	Dewsbury ..	Yorkshire	1 7	1 2½
B	Didcot ..	S. Counties	1 5	1 0½
A	Doncaster ..	Yorkshire	1 7	1 2½
B	Dorchester ..	S.W. Counties	1 3½	11½
A	Driffield ..	Yorks	1 5½	1 1
A	Droitwich ..	Mid. Counties	1 5½	1 1
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 7	1 2½
A	Durham ..	N.E. Coast	1 6½	1 1½
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale	S. Wales & M.	1 6½	1 1½
A	Edinburgh	Scotland	1 7	1 2½
A_1	E. Glamorganshire, Rhondda Valley District	S. Wales & M.	1 6½	1 1½
A_2	Exeter ..	S.W. Counties	•1 6	1 1½
B_2	Exmouth ..	S.W. Counties	1 4	1 0
B	FELIXSTOWE	E. Counties	1 5	1 0½
A_2	Filey ..	Yorks	1 5½	1 1
A	Fleetwood ..	N.W. Counties	1 7	1 2½
B_2	Folkestone	S. Counties	1 4	1 0
A	Frodsham	N.W. Counties	1 7	1 2½
B_2	Frome ..	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 7	1 2½
B_1	Gillingham	S. Counties	1 4½	1 0½
A	Gloucester	S.W. Counties	1 6	1 1½
A_2	Goole ..	Yorkshire	1 6	1 1½
A_2	Gosport ..	S. Counties	1 5½	1 1
A_2	Grantham	Mid. Counties	1 5½	1 1
A_2	Gravesend	S. Counties	1 6½	1 1½
A	Greenock ..	Scotland	•1 7	1 2½
A	Grimsby ..	Yorkshire	1 7	1 2½
B_1	Guildford ..	S. Counties	1 4½	1 0½
A	HALIFAX	Yorkshire	1 7	1 2½
A	Hanley ..	Mid. Counties	1 7	1 2½
A	Harrogate	Yorkshire	1 7	1 2½
A	Hartlepools	N.E. Coast	1 7	1 2½
B_1	Harwich ..	E. Counties	1 4½	1 0½
B_2	Hastings ..	S. Counties	1 4	1 0
A_2	Hatfield ..	S. Counties	1 5½	1 1
B	Hereford ..	S.W. Counties	1 5½	1 0½
B	Hertford ..	E. Counties	1 5	1 0½
A_1	Heysham ..	N.W. Counties	1 6½	1 1½
A_1	Howden ..	N.E. Coast	1 6½	1 1½
A	Huddersfield	Yorkshire	1 7	1 2½
A	Hull ..	Yorkshire	1 7	1 2½
A	ILKLEY ..	Yorkshire	1 7	1 2½
A	Immingham	Mid. Counties	1 7	1 2½
A_2	Ipswich ..	E. Counties	1 5½	1 1½
B_2	Isle of Wight	S. Counties	1 3½	11½
A	JARROW ..	N.E. Coast	1 7	1 2½
A	KEIGHLEY	Yorkshire	1 7	1 2½
B	Kendal ..	N.W. Counties	1 5	1 0½
B	Keswick ..	N.W. Counties	1 5	1 0½
A_2	Kettering ..	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 6	1 1½
B_2	King's Lynn	E. Counties	1 4	1 0
A	LANCASTER	N.W. Counties	1 7	1 2½
A_2	Leamington	Mid. Counties	1 6	1 1½
A	Leeds ..	Yorkshire	1 7	1 2½
A	Leek ..	Mid. Counties	1 7	1 2½
A	Leicester ..	Mid. Counties	1 7	1 2½
A	Leigh ..	N.W. Counties	1 7	1 2½
B_2	Lewes ..	S. Counties	1 3½	11½
A_2	Lichfield ..	Mid. Counties	1 5½	1 1
A	Lincoln ..	Mid. Counties	1 7	1 2½
A	Liverpool ..	N.W. Counties	•1 8½	1 3½
A_2	Llandudno	N.W. Counties	1 5½	1 1
A	Llanelly ..	S. Wales & M.	1 7	1 2½
	London (12 miles radius)		1 8½	1 3½
	Do. (12-15 miles radius)		1 8	1 3
A	Long Eaton	Mid. Counties	1 7	1 2½
A	Loughborough	Mid. Counties	1 7	1 2½
A_2	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 7	1 2½
A_1	MACCLESFIELD	N.W. Counties	1 6½	1 1½
B_1	Maidstone	S. Counties	1 4½	1 0½
A_2	Malvern ..	Mid. Counties	1 5½	1 1
A	Manchester	N.W. Counties	1 7	1 2½
A	Mansfield ..	Mid. Counties	1 7	1 2½
B_2	Margate ..	S. Counties	1 4	1 0
A_2	Matlock ..	Mid. Counties	1 5½	1 1
A_1	Merthyr ..	S. Wales & M.	1 6½	1 1½
A	Middlesbrough	N.E. Coast	1 7	1 2½
A_2	Middlewich	N.W. Counties	1 6	1 1½
B_2	Minehead ..	S.W. Counties	1 4	1 0
A	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 7	1 2½
A	Morecambe	N.W. Counties	1 7	1 2½
A_2	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7	1 2½
A	Nelson ..	N.W. Counties	1 7	1 2½
A	Newcastle ..	N.E. Coast	1 7	1 2½
A	Newport ..	S. Wales & M.	1 7	1 2½
A	Normanton	Yorkshire	1 7	1 2½
A_1	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7	1 2½
A	North Shields	N.E. Coast	1 7	1 2½
A_2	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7	1 2½
A	Nuneaton ..	Mid. Counties	1 7	1 2½
B	OAKHAM ..	Mid. Counties	1 5	1 0½
A	Oldham ..	N.W. Counties	1 7	1 2½
A_2	Oswestry ..	N.W. Counties	1 5½	1 1
B	Oxford ..	S. Counties	1 5½	1 1
A	PAISLEY ..	Scotland	•1 7	1 2½
B_2	Pembroke ..	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	•1 7	1 2½
A_2	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ..	S.W. Counties	•1 7	1 2½
A	Pontefract	Yorkshire	1 7	1 2½
A_1	Pontypridd	S. Wales & M.	1 6½	1 1½
A_2	Portsmouth	S. Counties	1 5½	1 1
A	Preston ..	N.W. Counties	1 7	1 2½
A	QUEENSFERRY	N.W. Counties	1 7	1 2½
A_2	READING	S. Counties	1 5½	1 1
B	Reigate ..	S. Counties	1 5	1 0½
A_2	Retford ..	Mid. Counties	1 5½	1 1
A_1	Rhondda Valley	S. Wales & M.	1 6½	1 1½
A_2	Ripon ..	Yorkshire	1 5½	1 1
A	Rochdale ..	N.W. Counties	1 7	1 2½
B_1	Rochester ..	S. Counties	1 4½	1 0½
A_1	Ruabon ..	N.W. Counties	1 6½	1 1½
A	Rugby ..	Mid. Counties	1 6½	1 2½
A_2	Rugeley ..	Mid. Counties	1 5½	1 1
A	Runcorn ..	N.W. Counties	1 7	1 2½
A_2	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens ..	N.W. Counties	1 7	1 2½
B_2	Salisbury ..	S.W. Counties	1 3½	11½
A_1	Scarborough	Yorkshire	1 6½	1 1½
A	Scunthorpe	Mid. Counties	1 7	1 2½
A	Sheffield ..	Yorkshire	1 7	1 2½
A	Shipley ..	Yorkshire	1 7	1 2½
A_2	Shrewsbury	Mid. Counties	1 6	1 1½
A_2	Skipton ..	Yorkshire	1 6	1 1½
A_2	Slough ..	S. Counties	1 5½	1 1
A_2	Solihull ..	Mid. Counties	1 6	1 1½
A_2	South'pton ..	S. Counties	1 5½	1 1
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ..	N.W. Counties	1 7	1 2½
A	S. Shields ..	N.E. Coast	1 7	1 2½
A_2	Stafford ..	Mid. Counties	1 6	1 1½
A	Stockport ..	N.W. Counties	1 7	1 2½
A	Stockton-on-Tees	N.E. Coast	1 7	1 2½
A	Stoke-on-Trent	Mid. Counties	1 7	1 2½
B_1	Stroud ..	S.W. Counties	1 4½	1 0½
A	Sunderland	N.E. Coast	1 7	1 2½
A	Swadlincote	Mid. Counties	1 7	1 2½
A	Swansea ..	S. Wales & M.	1 7	1 2½
B	Swindon ..	S.W. Counties	1 5	1 0½
A_1	TAMWORTH	N.W. Counties	1 6½	1 1½
B_1	Taunton ..	S.W. Counties	1 4½	1 0½
A	Teesside Dist.	N.E. Counties	1 7	1 2½
B	Teignmouth	S.W. Coast	1 5	1 0½
A	Todmorden	Yorkshire	1 7	1 2½
A_1	Torquay ..	S.W. Counties	1 7	1 2½
C	Truro ..	S.W. Counties	1 3	11½
B	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7	1 2½
A	Tyne District	N.E. Coast	1 7	1 2½
A	WAKEFIELD	Yorkshire	1 7	1 2½
A_1	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W. Counties	1 7	1 2½
A_2	Warwick ..	Mid. Counties	1 6	1 1½
A_2	Wellingborough	Mid. Counties	1 5½	1 1
A	West Bromwich	Mid. Counties	1 7	1 2½
B	Weston-s-Mare	S.W. Counties	1 5	1 0½
A_2	Whitby ..	Yorkshire	1 6	1 1½
A	Widnes ..	N.W. Counties	1 7	1 2½
A	Wigan ..	N.W. Counties	1 7	1 2½
B_1	Winchester	S. Counties	1 4½	1 0½
A_2	Windsor ..	S. Counties	1 5½	1 1
A	Wolverhampton	Mid. Counties	1 7	1 2½
A_2	Worcester	Mid. Counties	1 6	1 1½
A_2	Worksop ..	Yorkshire	1 5½	1 1
A_1	Wrexham ..	N.W. Counties	1 6½	1 1½
A_2	Wycombe ..	S. Counties	1 5½	1 1½
B_1	YARMOUTH	E. Counties	1 4½	1 0½
B_2	Yeovil ..	S.W. Counties	1 4	1 0
A	York ..	Yorkshire	1 7	1 2

• In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given. The rates for every trade in any given area will be sent on request.

PRICES CURRENT

The wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard, as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 3½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* NAVVY, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	10	0
Pit gravel, per yd.	0	15	0
Pit sand, per yd.	0	12	6
Washed sand, per yd.	0	13	0

Screened ballast or gravel, add 10 per cent. per yd.
Clinker, breeze, etc., prices according to locality.

Portland cement, per ton	£2	8	0
Lias lime, per ton	2	0	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

Cart and horse	£1	3	0	*Trailer*	£0	15	0
3-ton motor lorry	3	15	0	*Steam roller*	4	5	0
Steam lorry, 5-ton	4	0	0	*Water cart*	1	5	0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
If left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	1	17	6
DO. 6-2-1, per yd. cube	1	12	6
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	14	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete, 4-2-1, in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	3	0
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

LABOURER, 1s. 3½d. *per hour;* TIMBERMAN, 1s. 5d. *per hour;* BRICKLAYER, 1s. 8½d. *per hour;* PLUMBER, 1s. 8½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. 6 *in., per ft.*	0	1	3
DO. 9 *in., per ft.*	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 *in., per yd.*	0	8	0
Portland cement and sand, see "Excavator" above.			
Leadwool, per cwt.	£2	0	0
Gaskin, per lb.	0	0	4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	3
DO. 6 in., per ft.	0	10	3

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.
Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour.*

London stocks, per M.	£4	5	6
Flettons, per M.	2	12	6
White facing bricks, per M.	5	0	0
Multi-coloured facings, per M.	7	7	9
Best red facings, per M.	7	7	9
Rubbers, 9½ in., per M.	12	0	6
Staffordshire blue, per M.	9	5	0
Firebricks, 2½ in., per M.	9	5	0
Glazed salt, white, and ivory stretchers, per M.	21	10	0
DO. *headers, per M.*	20	10	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	£2	11	6
Mixed lime mortar, per yd.	1	6	0
Dampcourse, in rolls of 4½ in., Per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll*	0	7	6
DO. 18 *in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	30	0	0
DO. in cement do., per rod	32	10	0

DO. in stocks, add 25 per cent. per rod.
DO. in blues, add 100 per cent. per rod.
DO. circular on plan, add 12½ per cent. per rod.
DO. in backing to masonry, add 12½ per cent. per rod.
DO. in raising on old walls, etc., add 12½ per cent. per rod.
DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers, gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side, per ft. run	0		6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities, in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano. paving to old, per ft. run	0	0	4
Extra for dishing grano. or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

MASON

MASON, 1s. 8½d. *per hour;* DO. *fixer,* 1s. 9½d. *per hour;* LABOURER, 1s. 3½d. per hour; SCAFFOLDER, 1s. 4½d. *per hour.*

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	9
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super.	0	11	0
York templates sawn, per ft. cube	0	7	6
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	0	1	0

Add to the foregoing prices, if in York stone, 35 per cent.
DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	£0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	7	6
YORK SILLS, W. & T., ft. cub. fixed	1	10	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	3
DO. 2½ in. thick, per ft. sup.	0	1	6

SLATER AND TILER

SLATER 1s. 8½d. *per hour;* TILER, 1s. 8½d. *per hour;* SCAFFOLDER, 1s. 4½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*
N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per 1,200:

Portmadoc Ladies	£14	0	0
Countess	23	0	0
Duchess	32	10	0

Old Delabole	*Med. Grey*	*Med. Green*
24 in. × 12 in.	£42 11 3	£45 1 0
20 in. × 10 in.	31 4 3	33 0 6
16 in. × 10 in.	20 18 0	22 4 9
14 in. × 8 in.	12 1 0	12 16 3

Green Randoms, per ton	£8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	5	13	9

In 4-ton truck loads, delivered Nine Elms station.

Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	2	2
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:

Ladies, per square	£4	0	0
Countess, per square	4	5	0
Duchess, per square	4	10	0
WESTMORLAND, in diminishing courses, per square	6	5	0
CORNISH DO., per square	6	3	0
Add, if vertical, per square approx.	0	13	0
Add, if with copper nails, per square approx.	0	2	6
Double course at eaves, per ft. approx.	0	1	0

SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.

	Med. Grey	Med. Green
24 in. × 12 in.	£5 0 0	£5 2 6
20 in. × 10 in.	5 5 0	5 10 0
16 in. × 10 in.	4 15 0	5 1 0
14 in. × 8 in.	4 10 0	4 15 0

Green randoms	6	7	0
Grey-green do.	5	9	0
Green peggies, 12 in. to 8 in. long	4	13	6
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	3	17	6
DO., machine-made do., per square	3	7	6

Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries" for Asbestos Tiling.

CARPENTER AND JOINER

CARPENTER, 1s. 8½d. *per hour;* JOINER, 1s. 8½d. *per hour;* LABOURER, 1s. 3½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):			
7 × 3, per std.	£22	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	4	6
DO. *T. and G., 1 in., per sq.*	1	4	6
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	2
DO., *ft. cube*	0	14	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	4	6
DO. framed in floors, roofs, etc., per ft. cube	0	4	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	8	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	0	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

[*continued overleaf*

CARPENTER AND JOINER: *continued*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ⅞ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1½ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic:			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¼ in thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded, per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work:			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	0
If ramped, per ft. run	0	4	6
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1½ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS:			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding per ft. sup.	0	4	6
IRONMONGERY:			
Fixing only (including providing screws):			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

SMITH, *weekly rate equals* 1*s.* 8½*d. per hour*; MATE, *do.* 1*s.* 3½*d. per hour*; ERECTOR, 1*s.* 8½*d. per hour*; FITTER, 1*s.* 8½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Mild Steel in British standard sections, per ton	£12	10	0
Sheet Steel:			
Flat sheets, black, per ton	17	0	0
DO., *galvd., per ton*	18	0	0
Corrugated sheets, galvd., per ton	17	10	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	25	0	0
DO., in small sections as reinforcement, per ton	16	0	0
DO., in compounds, per ton	17	0	0
DO., in bar or rod reinforcement, per ton	22	10	0
WROT-IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

PLUMBER

PLUMBER, 1*s.* 9*d. per hour*; MATE OR LABOURER, 1*s.* 4*d. per hour.*

Lead, milled sheet, per cwt.	£1	13	0
DO. *drawn pipes, per cwt.*	1	13	6
DO. *soil pipe, per cwt.*	1	16	6
DO. *scrap, per cwt.*	1	1	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	0
DO. *fine, per lb.*	0	1	6
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	3	0
DO. *4 in., per yd.*	0	3	8
R.W.P., 2½ in., per yd.	0	1	5
DO. *3 in., per yd.*	0	1	8
DO. *4 in., per yd.*	0	2	5
Gutter, 4 in. H.R., per yd.	0	0	11
DO. *4 in. O.G., per yd.*	0	1	2½
MILLED LEAD and labour in gutters, flashings, etc., per cwt.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	2
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	4
DO. 1¼ in., per ft.	0	4	5
LEAD WASTE OR SOIL, fixed as above, complete, 2½ in., per ft.	0	6	6
DO. 3 in., per ft.	0	7	9
DO. 4 in., per ft.	0	10	6
WIPED soldered joint, ½ in., each	6	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	4
DO. 3 in.. per ft. run	0	1	8
DO. 4 in., per ft. run	0	2	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	1	6
DO. O.G., 4 in., per ft.	0	1	9
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	3	0
DO. 3 in., per ft.	0	2	0
Fixing only:			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 11½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	2	5	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths per bdl.	0	2	5
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *white, per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Lath nails, per lb.	0	0	4
Ferrocrete, per ton	2	15	6
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	6
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¼ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	0
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	7
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	2
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 7½*d. per hour.*

Glass: 4ths in crates			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7½
Polished plate, British ¼ in., up to 2 ft. sup. per ft.	0	1	2
DO. *4 ft. sup.* ,,	0	2	3
DO. *6 ft. sup.* ,,	0	2	6
DO. *20 ft. sup.* ,,	0	3	1
DO. *45 ft. sup.* ,,	0	3	3
DO. *65 ft. sup.* ,,	0	3	5
DO. *100 ft. sup.* ,,	0	3	10
Rough plate, ⅛ in., per ft.	0	0	6½
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	15	0
GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO., 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	£0	1	4
DO. 26 ozs., per ft.	0	1	1
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	0
Glazing only, polished plate, 6½*d.* to 8*d.* per ft. according to size.			

PAINTER AND PAPERHANGER

PAINTER, 1*s.* 7½*d. per hour*; LABOURER, 1*s.* 3½*d. per hour*; FRENCH POLISHER, 1*s.* 8½*d. per hour*; PAPERHANGER, 1*s.* 7½*d. per hour.*

Genuine white lead, per cwt.	£3	0	9
Linseed oil, raw, per gall.	0	4	6
DO., *boiled, per gall.*	0	4	9
Turpentine, per gall.	0	4	7
Patent driers, per cwt.	1	10	6
Knotting, per gall.	0	15	0
Distemper, washable, in ordinary colours, per cwt., and up	2	2	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4½
Single gold leaf (transferable), per book	0	2	0
Varnish, copal, per gall. and up	0	15	6
DO., *flat, per gall.*	0	15	6
DO., *paper, per gall.*	1	2	6
French polish, per gall.	0	16	0
Ready mixed paints, per cwt. and up	3	10	0
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	9
DO., subsequent coats, per yd. sup.	0	0	8
DO., enamel coat, per yd. sup.	0	1	0
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	0
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . . from 3*d.* to	0	0	6
Plaster-board, per yd. sup. . from	0	1	7
PLASTER-BOARD, fixed as last, per yd. sup. . . . . from	0	2	3
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ¾ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casements in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.

PLYWOOD, per ft. sup.

Thickness	3/16 in.			¼ in.			3/8 in.			½ in.		
Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch	4	3	2	5	4	3	7½	6	4½	9½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4½	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	6½	5	—	8	—	—	—	—	—